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Majorca

RB Kennedy

(10)

2-4-30 ? *Cistus albidus* L. Bon 35, Bar. 46
Kn. II 193. Collected by Mr. Heron
on "rough road" bet. Génova & Cas Catala.
Fl. bright purplish rose. Petals 1 in x $\frac{3}{4}$ in.
Ovary 5 celled, ovules axile, ovary silky hairy
on outside. Sepals 5, the 2 inner somewhat
smaller. St., lvs, sepals densely starry woolly.

2-4-30 *Helianthemum Fumana* Mill Kn II
203 = *Fumana Spachii* Griseb. Bar 51 and Bon 36
Road bet. Génova & Cas Catala (See 3-17-30 & 3-20-30).

2-4-30 *Antirrhinum Onontium* L. Kn II 384
Bar. 336. Bon 232 Field of yf. chapel bet. Génova &
Cas Catala. Ovary silky hairy. (See 4-10-30)

2-4-30 *Antirrhinum Majus* L. Bar 337, Bon 232
= *Antirrhinum* cult. & *Antirrhinum* ch. with above. Lvs on young
plants often in 3's. Seeds black & very rough (See 4-10-30)

2-4-30 ? *Icceras longibracteata* Reichb. Kn
I 412, Bar 456 = *Icceras* — Bar Bon 311.
Questioned only because recorded as "rare". East side

= *Barlia* — *Purk* (See *Barlia* — *Riviera Nature Notes*
p 252 fine ill.)

7 road bet. Chapel (below Génova) and Cas Catala.
St 12 m high (10 in above ground). Lfys top. Lower
lvs (3) ~~fl~~ to 5 in x $1\frac{1}{4}$ in, upper (5th) bract like
Peceme 4 in long, dense. Total bract to $1\frac{1}{2}$ in,
exceeding fl. Sepals & petals separate, greenish
with purple spots. Lip more than 3x as long, 3 lobed
with central lobe divided center light marked with
purple, edges ruffled, brownish purple. Caudicles
united in one gland concealed in a pouch, below
which is the noticeable purple stigmatic cavity.
Above pouch is a small protuberance. Pollen in
grain like formation. Lip has short, blunt. Con-
ceal spur $\frac{1}{4}$ - $\frac{1}{3}$ as long as ovary. (see 2-24-30)

2-4-30 *Centaurea aspera* L. Kn II 496, Bas 268,
Bon 179, B & H 265, Road bet Chapel (below Génova) &
Cas Catala. (see 3-10-30)

2-4-30 *Pistacia Lentiscus* L. Kn II 167, Bas 100
Bon 65, *Riviera Nature Notes* 36 ill. Fr. 70 fl. Bet
Génova & Cas Catala. Low shrubby growth very common.
Lvs with "red crescent shaped galls" (see R. N. N. (see 3-14-30)
See B.M. C.P. for char of genus. p 460.

2-4-30 *Anagallis arvensis* L. Kn II 367 Bas 305
bet. Génova & Cas Catala. Blue. (see 3-14-30 blue &
3-30-30 red)

2-4-30 *Tenaxium* ——— bet Génova &
Cao Catala. upper part of foot path short cut.
T. capitatum L. Bar 375 & Bon 257 since
calyx lobes are blunt & stamens (at least some-
times "roulant sur elles-mêmes" after flower-
ing. But not. Kn. II p 314-316 seems to consider
this as form of *T. Polium* L. Fl. rosy purplish same
shade as *Cistus albidus*.

2-4-30 *Erica multiflora* L. Kn II 259, Bar. 298
Bon 202. Young fr but fl. parts remaining. Bet.
Génova & Cao Catala. (See 3-14-30)

2-4-30 *Lepidium graminifolium* L. Kn II 13, Bar 41,
Bon 33 Fl & fr. near Génova.

2-4-30 *Geranium molle* L. Kn II 127, Bar 8,
Bon 57 Bon 95 (ill) Near Génova (westward from
San Feliu) Lvs. round, petals notched. (See 2-27-30)

2-4-30 *Erodium malacoides* L. Kn II 129 Bar 83
= E. ——— wild Bar 83, Bon 58 Near above. Lvs oval
petals entire

2-4-30 *Esodium moschatum* L'Her Kn II 131
Bar 84, Bon 59, BON 97 (ill) Near above. Lf definitely
pinnate. Not E. *creonium* Willd because filaments
not ciliate (Bon) & lf like illudesc. (Bon). But no odor
(much). Stout plant mat like with thick root.
(See 3-16-30) (Cu 2 27-30)

2-4-30 *Lavandula dentata* L. Kn II 320 Bar 353
Hillsides bet. Sinora & Cas Catala common. Upper
top ~~hood~~ of calyx ^{brood} bract like. ~~Perfect & imperfect~~
~~stamens in flower~~ Stamens very short, in-
cluded not noticeably "appuyees sur la lèvre infé-
rieure" (Bon), ²⁴⁷ perhaps imperfect. Upper floral bracts
conspicuous, lavender. Tormentum stony.
(See 3-14-30)

2-4-30 *Anthyllis Cytisoides* L. Kn II 87, Bar III, Bon 78
Bet. Sinora & Cas Catala. Very like ill Bon. (See 3-26-30)

2-4-30 *Fagonia cretica* L. Kn II 137, Bar 94.
Collected by Mr Heron bet. Sinora chapel
& Cas Catala. But cells seem to have 2-ovules, other
was as desc. (See 3-17-30) Fls almost 1 in across
Angles of ovary pubescent, ovules 2 in each cell
pendant from ^{short} stalk that rises from axile mes
base of cell, only 1 developing when it seems to become
upright. Stalk looks rather thickish triangular.
See 11-20-30

x On road west of Kenora cemetery

2-4-30 ? *Salvia verbenacea* L. Kn II 341 = *S. verben-*
acea L. Bar 364, Bon 250, BUN 357 (ill) Near
Kenora. Fr. & v. badly withered buds. Stamens clearly
2 tho connective short. Upper lip of calyx has 3 tiny
teeth. No fls seen.

2-4-30 *Arisarum vulgare* Targ. Tozz Kn I 355 =
A. — Kunt, Bar 468 = *Arum Arisarum* L. Bon 317
Kenora. ♀ at base of spadix, stigmas stipitate. Stoma-
not densely packed. (See 3-14-30)

2-4-30 *Fedia Caput-bovis* Pan. Kn II 435, Bar 578
See also ill of *F. Cornucopiae* Gaertn. Bar 144) Kenora.
(See also desc. B.M. & C.P. 731) Stamens 2, ~~style often lacking~~
stigma 3- parted. See Bar 578 not carefully verified
Tube of corolla has thickened spot near base. (perhaps
takes place of spur in *Centradneus*)

2-4-30 *Paronychia argentea* Lamb Kn I 460
Bar 179, Bon 109. Kenora (See 3-17-30)

2-4-30³ *Euphorbia helioscopia* L. Kn II 147, Bar 411
Bon 280. B. H. (ill) Kenora. But lvs. esp upper ones

sessile. Seeds not advanced enough to see
char. (See 3-25-30 Pods smooth, seeds pitted)
(See 3-26-30 seeds brown with ridges grayish)

2-4-30 *Globularia Alypum* L. Kn II 403. Bar
384, Bon. 264, Belva Génora (See 11-27-30)

2-4-30³⁰ *Medicago Murex* Willd var *sphaerocarpa*
Urban Kn II 75 = *M. sphaerocarpa* Bertol Bar 118
Bon 74. Génora. Linnaea fr. Half fallen when
studied (3/11) identified mostly from Bon. Pods 4-5
spirals making almost globular effect. Spines
as long as distance between. Curved but not
hooked. Edges of spiral slightly ridged, not furrow-
ed. Pod almost smooth (few short hairs). Spirals
counter clockwise. Stipules not deep, narrow
teeth. Lvs dentate above middle. Fr at this stage 6-7
mm. across.

2-4-30 *Scandix pecten veneris* L. Kn II 226, Bar 210
Bon. 134 BuH 204 (ill). Génora See (3-430)

2-4-30 *Veronica agrestis* L. forma *polita*
Kn II 387 = *V. didyma* Ten Bar 344. ~~See also~~ Bon 237
= *V. polita* ● Fries ● BuH 349 ●

2-4-30

Bon 237 and B.H. 348 ill) Sepals are 3-nerved, sharp with a spurred appendix at base & style surpasses the sinus. But lvs are hardly "lampiñas. Casi Carnosas". (See 2-24-30)

2-4-30 *Bellis annua* L. Knott 445, Bar 240, Bon 162 Génova.

2-4-30 *Chrysanthemum coronarium* L. Knott 477
Bar 245, Bon 167. ^{Rays yellow.} Génova (See 3-4-30 Rays creamy with yellow center)

2-4-30 *Echium calycinum* Viv. Knott 310, Bar 323 Bon 223. Génova. Fl. withered when studied 2/3.
See 2-25-30. & 3-10-30

2-4-30 *Plantago* ——— Génova. 1 in woody stem bears lvs closely alternate but not in rosette at top. Lvs linear $2\frac{1}{2}$ - $3\frac{1}{2}$ in x 2-3 mm., entire, one nerved, silky gray canescent, not fleshy. Lf. narrowed somewhat towards base & then widened a little where it is rolled around stem. Fl. stem from below lvs. $5\frac{1}{2}$ in, slender, slightly ridged & twisted, not hairy. Spike $1\frac{1}{2}$ in, slender. Bracts about as long as broad, middle convex & slightly

hairy ending in sharp hairy point & edges thin & wing like. Lvs sepals hairy on outer edge. Fls in thurs & seeds not developed.

[Nt 2-23-31 This was perhaps *P. albicaulis*. See 11-14-99
- 30. Discrepancies in desc. due to poor spec. or inexperience of P.B.K.]

2-4-30 *Asphodelus frutulosus* L. Kn I 365
Bar 441, Bon 301 Near Cas Catala. Very common.

2-4-30 *Asphodelus ramosus* L. var *microcarpus*
Salis Kn I 365 = *A. microcarpus* Viv Bar ⁴⁴¹
~~*A. albus* Willd~~ Bon 301 (See also *A. albus* Mill
B.M.J.C.P. 174) Near above. Just coming into fl.

2-4-30 *Oxalis cernua* Thunb Kn II 132, Bar 99.
Near Génova. Common. Lvs spotted purple.
See B.M.J.C.P. 438 (See 1-6-31)

2-6-30 *Opheys fusca* Link. Kn I 408, Bar 462
Bon 313 Collected by Mr. Heron Belver.
From desc. Bon, & B. V. H. 464 might be thought to be
~~*O. muscifera* Naud.~~ but this not recorded from
Majorca. See also *O. speculum* Link Bar 461 with
some points of similarity. Lower bracts reach to
top of fl. Lip cut to about middle, lateral lobes turned
down, central one notched & more or less convex.
Pollen as in *Acceas longibracteata* (2-4-30) Anthers
& stigma greenish. (See 2-27 & 3-20-30)

2-6-30 *Olechia tridentata* Scop Kn I 400, Bar 458
Bon 311 (But lip definitely 3 divided as in Bar.) Collected
by Mr. Heron Belver. $4\frac{1}{2}$ in high. Sepals & petals
firm hard but are almost if not quite free, very sharply
long acuminate, white or greenish white with
purple nerves. Lip white with purple dots. Ovary
2 in 1 sac. Pollen as in *Acceas longibracteata*.
Anthers purple, stigma light. (See 2-27 & 3-4-30)

2-10-30 Malvaceae Collected by Mr. Heron "common
along roadside Terreno". Either *Malva* or *Lavatera*.
The 3 ext. bracts (ovate) are slightly united at base
& the 3 together can be separated from calyx sug-
gesting L. It seem to be single in axis & since
bracts in young fr. not as large as calyx would

* locality not probable Kn II 178

to *L. maritima* Luan. Plant is covered with stam hairs but not with lvs as white as Bon 56 nor petals as Bar 77.* If upper fls (still in bud) are several in axil plant might be *L. cretica* L. If a *Melva* might be *M. sylvestris* L. Bon 55; Bar 76 since hairs on stamens tube are stammy & petals tho hardly 3x as long as calyx are "purpurinoe con venas violadas." Petals with 1 or more notches at apex. Carpels smooth. (See 3-4-30 v 3-6-30)

2-10-30 *Acacia longifolia* Willd. B.M.P.C.P 430
See Riviera Nature Notes 136. Bought in Palma. Phyllodia $\frac{1}{2}$ - $\frac{5}{8}$ in ^{wide} mucronate. Gland on edge of phyllodium near base. (See 3-13-30)

2-13-30 *Hyoscyamus albus* L. Kn II 364, Bar 332
Bon 227. Fl & fr. back road to Palma. Filaments purple
= *H. major* Willd Bon 227 (See 3-4-30)

2-13-30 ? *Fumaria officinalis* L. Kn II 9, Bar 23
Bon 14. Fl & young fr. back road to Palma. Diffuse & spreading, 1 ft high. Corolla 7 mm long w. dark at apex. Sepals broader than pedicels, about as broad as corolla (sometimes less & sometimes more) & about half as long as corolla without

3-13-30 without

spus. Fr. slightly flattened, slightly broader than long, no hollow in summit (at this stage)

Consider possibility of *F. micrantha* Lag. = *F. densiflora* DC. ^{bracts} are as long or longer than pedicels but fruit shows no sign of "largamente apiculada"

2-13-30 *Reseda alba* L. Kn II 38 Bar 55, Bon 53
BM CPS 15 = *R. suffruticosa* L. Bon 38 Back road to Palma after turning to right on highway Fr. too small to study.

2-13-30 *Plantago Psyllium* L. Kn II 412, Bar 388
Bon 259. Back road to Palma. Stamens purple petals yellowish

2-13-30 ?? *Carduus tenuiflorus* Curt. Kn II 487
Bar. 266, Bon 177. Fl v fr. back road to Palma.
Thistle, st slender winged with suffly, pointed, spiny wings near base white webby. Lvs pubescent above, white webby beneath, prickly. Fl. in narrow oblong heads singly or severally almost or quite sessile. Anthers seem lacinated at base (below point of joining filaments) but (see Bar 261) only genera in tribe 5 with

prickly lvs (See Bon 175) are *Carlina* &
Atractylis - dismissed because of their
pubescent achenes. Stamens are free
& pappus of hairs definitely barbed their whole
length (but prob. not to be considered plumose)
and united in ring at base. Pappus
very pale tan, achene smooth, shining
nerved, oblong, flattened somewhat, about
5 mm long x 2+ mm wide. Corolla purple.
Bracts more or less webby, acuminate with
sharp points, the inner less sharp &
tinged purple. But no "little glands of
brilliant yellow" (Bon 177) Fl. head about
 $\frac{3}{4}$ in high by $\frac{1}{4}$ in wide. (See 3-17-30. & 11-22-30)

2-13-30 ? *Carlina lcnata* L. Kn # 484, Bar
273, Bon 182. Back road to Palma. Dried plant but
with perfect remains of basal lvs. & fl. heads (1 very
close to ground & others solitary on stems 8+ in
high, some of these stems bearing just below
fl. head, others st. bearing fl. heads. Invol as deep.
Scales bet. fls. seem to be tubular, lacerated
at top. No achenes seen.

[Prob *S. rubella* L. Kn I 462, Bar 62. See How ident of
#674, 3-23-32 and #676 5-15-32.

3-13-30 *Silene*

Fl & unripe fr. ~~Edge~~ Edge of field back road to Palma.
7 in high, many branches from base some some-
what decumbent. Root whitish. St. purplish
esp. at base. Lvs smooth but (20x) covered with
tiny stiffish downward curved hairs which are
enlarged at base. Lvs spatulate narrowed to
petiolar base or oblong & sessile. the largest $1\frac{3}{4}$
 $\times \frac{9}{16}$ in, obtuse, edges strongly ruffled. Lvs look
smooth & glabrous beneath but above on edges
have short stiff hairs (20x). Lvs clasping with in-
ternodes enlarged just above. Infl. dichotomous
cyme (not always regular), peduncles except
flower at fl short. Calyx & whitish with veins
& limb more or less purple. Almost if not quite smooth
but (20x) seems minutely tubercled. The round
ciliate lobes about $\frac{1}{3}$ - $\frac{1}{6}$ length of calyx (1.2 mm) in
anthesis when calyx gradually enlarges
from a truncate (not dimpled base), to a slightly
constricted throat below the very slightly
~~of~~ flaring limb. After anthesis calyx enlarges
somewhat (not inflated) & limb does not
spread. Calyx beautifully ¹⁰veined: 5 veins
ending in lobes, the other five branching
in 2 just below the sinus these branches
joining the enlarged ends of the 1st set of nerves.
Corolla dark rose, small, projecting beyond

not at all sticky.

calyx 3 mm. Petals notched (not deeply)
Scale at base of limb divided to base in
2 oblong rounded lobes $\frac{1}{3}$ length of limb.
Petals free as to claw & limb but seem to be
joined just at base of limb. Longest stamens
& pistils extend barely beyond throat. Capsule
smooth, oblong 8 mm long, on a thick
ridged stalk 4 mm long. Seeds brown,
reniform, hollowed on sides, a shallow
groove making 2 rounded ridges on
back. Back roughish with low tubercles.

2-13-30 *Carrichtera Vellae* DC. Kn II 36 Bar 39.
Fl & unripe fr. Bach road to Palua. Cotyledons
are incumbent or perhaps (since they may
have unfolded in dissection) conduplicate.
Seeds in fr. examined are 3 in each cell. Otherwise
as desc. Note in addition that while fl & ovary are
upright the st. in fr. are deflexed and twisted
around st. so that the foliaceous style is
almost horizontal (cupped upward some-
what) Fr. has stiff hairs on the nerves. Sepals
convincient in bud & early fl. & calyx easily
mistaken for gamosepalous. Fl small 8 mm.

2-13-30 *Lamium amplexicaule* L. Kn II 337
Bar 366 Bon 252. BVH. 37 (ill). Back road to Palma
12 m. high. Calyx very hairy. Anthers hairs. Middle
lobe of lower lip of corolla notched & spotted
with darker purple. Lateral lobes almost
lacking.

2-13-30 *Ertica membranacea* Poir. Kn I 420
Bar 424, Bon 284. Fl. Back road to Palma.

2-13-30 *Ertica urens* L. Kn I 419, Bar 424
Bon 284 BVH 413 (ill). Fl. Back road to Palma.

2-13-30 *Mercurialis annua* ^{forma ambigua} L. Kn II 143, Bar 419
Bon 282 BVH. 409 (ill) ♂ & ♀ fls. Back road to Palma.
Plant bears elongated ^{sterile} peduncles of male fls and
in axils of lvs very short stemmed clusters of ♂ &
♀ fls intermixed hence prob forma ambigua
Kn II 144 = *M. ambigua* L. Bon 283, BVH. 409
(See 1-2-31)

2-13-30 *Schirardia arvensis* L. Kn # 414, Bar 227 Bon¹²³
BVH 224 (ill) Back road to Palma.

? *Solanum*

2-13-30 *S. nigrum* L. forma *villosum* Kn # 363
= *S. villosum* Lamb Bar 329, Bon 237 See B & H.

S. nigrum 330 (ill) Flv unripe fr. Back road
to Palma. Corolla white tinged purplish, yellow
at base. Calyx 3 mm at most, corolla 9 mm. St.
brown-purple, rough & hairy, lvs rough pubescent
(not tomentose) apt to be purplish on veins beneath
& edges. [Desc. in *Av Coate* not available when this
studied.]

2-13-30 *Diploaxis erucoides* DC. Kn # 18,
Bar 31, Bon # 22. Flv fr. ~~Back~~ Back road to Palma
Very common in fields. St. branching from
base, roughish with short downward point-
ing hairs. Cotyledons folded ~~long~~ longitudinally.
Petals white tinged purplish on claw & filament
purplish. Valses with 1 dorsal nerve - not "venosa"
Seeds in 3 rows. Tip of fr. like silique but flatter
and bluntly & shallowly 2-lobed. not found to
be "monosperma en sa base", Lvs much like
ill Bon. - perhaps as widened at tip. (See 2-25-30)

2-13-30 *Euphorbia*

Back road to Palma. Some general resemblance to
?? *E. platyphylla* of 2-14-30 except that gland on out-
side is flat with an oblong projection at each
corner. ^{not a true crescent.} no fr. seen. (See 2-25-30)

2-13-30 *Calendula arvensis* L. Kn II 483, Bar 260
Bon 174 Back road to Palma. Tubular fls have
rudimentary style, cone shaped at top.

2-13-30. *Quercus Ilex* L. (see 2-25-30)
Shrub at edge of field back road to Palma no fl
or fr. St. glabrous gray, short tomentose. Lvs ^{coriaceous} alt, oval
with prickly tipped teeth (effect of holly), slightly
heart shaped at base, very short pedicels.
Shoots at first pubescent above but white velvety
below. Bases sometimes unequilateral.

2-14-30 *Nicotiana glauca* Rich Bar 332 Fl.
In wall at Porto Pi.

2-14-30. *Olea europaea* L. (see 3-11-30)
Shrub. Prob. roadside near Porto Pi No fl or fr.
St lead color, beautifully laced in lighter gray.
Conspicuous because of small lvs. Lvs opp,
coriaceous, oval 7 mm x 6 mm, entire, edges
slightly revolute, very dark green above, with
traces of silvery scaly covering of young

lvs. White beneath. Almost sessile, mid nerve only shows. (See 9-11-30 which suggests this is growth from old stumps.

2-14-30 *Asparagus stipularis* Forst. Kn I 381

West of Cas Catala No fl or fr. Shrublike. Greyish, smooth. no lvs but branchlets & tips of branches provided with alt. thorns to $\frac{3}{4}$ in long tipped with sharp yellowish points. Sometimes a thorn has 2 short ones at sides, at base. Thorn node back from st. as would petiole of lf. Below each thorn remains of a tiny scale & below each branchlet a spiniferous scale such as on some sp. of *Asparagus*. ~~Could this be A.~~
stipularis Forst Kn I 381 = *A. horridus* L.
Bar 443. (See 3-30-30 & 11-5-30) (2-16-31 Rose identifies this as source of the asparagus sold in Palma shops)

2-14-30 *Asparagus albus* L

No fl or fr. West of Porto Pi just west of Cas Catala. Looks like another *Asparagus*. St. Very slender, white, somewhat ridged ^{Physalis Cladodes} $\frac{1}{2}$ in long & less in fascicles in axil of straight thorn $\frac{1}{4}$ - $\frac{3}{8}$ in long. Thorn has same char. as st. & not articulated with it.

Consider *A. albus* L or *A. acutifolius* L. *Cladodes* not at all prickly

2-14-30 *Asparagus* ^{*acutifolius*} ~~*albus*~~ L. Kn. I 380 Bar. #42
Fr. Highway west of Cas Catala. Fr. solitary ^{*Racem.*} ~~*Cladode*~~
in fascicles 3mm long sharp pointed but not really
prickling. A very sprawling branched st. bears
branches to 10 cm which in turn ^{may} bear branches
1-2 cm. Branches ridged & pubescent. (^{*Rac.*} See *albus*.)

3-14-30. *Daucus Carota* L. Kn. II 253. Bar. 190 Bon. 124
Highway west of Cas Catala. Fl. & very young fr. Differs
from ^{*as umbellifer*} *H. H.* in umbel more convex & each umbellet
more convex & apart from others. Central fl. purple.
All fls in bud definitely pink. Young fr. has raised
stars bet. prickles. After activation fl. concave as at
H. H. Umbel (in one case) almost 15 cm. but not otherwise
like *D. maximus* Desf (See Bon. 124)

2-14-30 *Cneorum tricoccum* L. Kn. II 138, Bar.
65 = *C. tricoccum* L. Bar. 100. See also Riviera Nature
Notes p. 86 ill. Fl. & unripe fr. Shore west of Cas Catala.
(See 3-17-30)

2-14-30 *Cistus monspeliensis* L. Kn. II 197, Bar. #7, Bon. 34
Fl. (only) bud, & remains of last yrs. fr. Shore west of
Cas Catala. Common. Lvs revolute, sticky. Sepals
nearly equal, red veined. Ovary stammy hairy at

very tofs. (See 3-30-30)

(Note 12-29-30 Comp. this have been V. mistletoe)

2-14-30 *Valantia muralis* L. Kn II 426 = *Vaillantia*

— Bar 224, Bon 142. Fl & young fr. corr along shore west of Cas Catala. St. & lvs entirely smooth. (oralenort) Fl has a line of hairs below on pedicels & fls. Fr smooth except for spiny projections (See 3-14-30)

2-14-30 *Helianthemum glutinosum* Pers ²⁰⁵ Kn II

Empty fruit pods. Shore west of Cas Catala. Slender, branching shrub. St. reddish brown with shredding grayish bark. Branches of fr. Lvs crowded in short opp branches, opp, stipulate, linear, 5 mm or less long, margins strongly revolute. Fls terminal, peduncles bracted at base & pubescent, branching in 2's. Persistent sepals 3, almost if not quite separate. Capsule 3-celled & 3-valved locicidally, about 6 mm across when wide open. Lvs more or less glaucous, look fleshy. "Stipules" like little scales. Poss. Cistaceae.
3-17-30 Prob the same on "rough road" from Genoa cemetery to Cas. Catala. Note stipules have hair-like appendage at tip. Sepals nerved (part 5) ^{shallow} Seed pitted on back (See 4-10-30)

(Ident. later by desc. Costa I 151) - *Fumana viscid.*

Spach

Bar 27

Box 36

Costa I 151

Forst. f.

2-14-30? *Myopospermum lactum*, B.M. & C. P 708

Fl. Tree (small) in garden of hotel Cas Catala (end of tram)
On twig collected 1 pair lvs opp. the others above bearing
fls in axils. Lvs 2-3½ in long (fine. short petiole)
lanceolate, acute, narrowed at base, bright
green, ^{aligning} almost fleshy, seem to be entire or very
slightly roughened on edge above middle. Possibly
with pellucid glands (See also Riviera Nature
Notes 196). Fls several in axillary fascicles. Calyx
lobes short triangular 5. Corolla tube short, limb
almost regular 5 rounded lobes ½-5⁄8 in across.
white with definite purple spots in throat, hairy
in throat & somewhat on lobes. Stamens 4, with
sometimes a 5th underdeveloped. Filaments attached
near base of tube & shortly exerted. Style simple, hairy,
making curving in & then out in position where
5th stamen would be expected. No further exerted
than stamens, 3 stigmatic spots on unequal
ed apex. Ovary superior, on axis, 3 cells with
1 ovule in each cell (sometimes 2 ovules in some
of cells & sometimes 3rd cell seems abortive. Ovules almost
pendulous i.e. attached very near top.

{ N.B. Casa Veyrat, Valencia cat. from Dr Cardell
adv. p 37 *Anthoecsis* = *Myopospermum pictum*)
See Knoche I 61.

2-14-30 *Anemone coronaria* L. Kn II 480 Bar 8
Bon 5 Highway west of Cas Catala

2-14-30 *Salvia clandestina* L. Bar 364 in in
S. verbenacea L. Kn II 341 see also *S. horminoides*
Pour Bar 251, and *S. verbenacea* L. BMJ C.P. 639.
Fl. ~~The~~ Road to fort just so. of junction with highway
west of Cas Catala. Dif. from 2-4-30 in upper
lp of calyx which is notched but has not 3 teeth.
(at least in some cases) Calyx gland. pubescent.

2-14-30 *Scabiosa maritima* L. Kn II 440 Bar
234. Bon 148. (See also BMJ C.P. 732) Fl. unripe
fr. Near above. Ident. largely by Bon's desc of
"Collarete." Involucel ridged & lower part hairy
on ridges, upper part flaring with ruffled
edges crimped inward. Calyx (on hairy pedicel)
at mouth of involucel, a 5-pointed star with
bristles to 3mm long barbed upward. Outer
fl. much larger than inner. Fr. ovoid. (See 3-30-30

2-14-30 *Passerina hirsuta* L Kn II 214, Bon 276
= *Thymelea* — Endl Bez 407 (See B.M. of C.P. 528 for char
of family) Fl & fr. Shore opps Las Illetas v on island.
Plainly of *Thymelaeaceae* v not *Daphne*. But the
short thick overlapping lvs. are smooth only on
the dark green under side. The edges are rolled up-
ward and the upper surface thickly covered with
white tomentum, like stems v exterior of calyx.
Only 5 fls found but plenty of fr in various stages
on same plant. (See 11-22-30)

? *E. acrota* L. See 11-14-30

2-14-30 ^{??} *Euphorbia plataphyllos* L. Bon 280, Br H
406 = *E. plataphylla* Bez 412. See Kn II 148. Fl (fr too
young to study) Rd to fort south of junction with high-
way west of Ca's Catalá. 18' high. much branch-
ing from base (fr not shrubby) Many branches
sterile. Glabrous, glaucous, grapiate. Lvs firm v
coriaceous. Those on sterile branches opps (as
are slender secondary branches) on fertile branches
alt.; sessile, bluish glaucous, reflexed, lanceolate,
pointed, with spreading, irreg. sharp teeth {from
base of petiole} ^{large}
Invol. lvs almost semi-circular clasping, sharply
toothed yellowish. Umbels cymose (usually a single
fl. head bet rays) 2-4 rayed, compound, some-
times with single ray from in axil of upper lf.
Stamens yellow, rounded on outside. Capsule (very

Others whose ident. is unquestioned.

young) smooth. Seeds too young to study.
4-25-30 Seeds not wholly ripe (very smooth, glabrous)
Coriaceous cap. like, provided with notch on one side & edge
somewhat lobed: blade as much as in crenate as

2-14-30 *Phillyrea angustifolia* L. Kn II 579, Bar 308
Bon 211. Coast west of Cas Catala. Buds & young
fr. Lvs. lanceolate linear but with low distant
teeth. Lvs. punctate glandular. Fls in very
small axillary clusters more or less compound.
BMGC.P. 593 (see 3-14-30)

3-14-30 *Statice*

Shore west of Cas Catala. Dead plant Lvs all
in rosette at base spatulate, entire with
minute black specks on both sides (may not be on
living plant) Lvs to $1\frac{1}{4} \times \frac{3}{8}$ in. Infl. like *Statice*
bracts mostly silvery. Note later if poss
S. bellidifolia Gouan Bar 388, Bon 263
see 10-19-30

2-14-30 ? *Atriplex Halimna* L. Kn I 440, Bar 394
Bon 267 Low shrub on Las Illas & adjoining
main land. Infl terminal, comp. paniculate
(dried but seeds remaining) Bark white shredding
Lvs alt. entire, silvery white on both sides
(see 11-17-30)

[See 6-4-34 Switzerland]

B & H 19 (ill)

2-14-30 *Papaver dubium* L. Kn II 5; Bar 20 Bon 13
Field highway west of Cas Catala. ~~It~~ Identified
by capsule which is fully "twice as long as broad
& narrowed at base" Lvs mostly more deeply divided
than ill Bon & less so than ill B & H. But looks of a type
mas do overlap (slightly) as does Bar & Bon for
P. Rhoeas L. [Query: Was this *P. sinuatifidum* Moench?
~~up to April 1935 P.B.H.~~ Since getting Costa which says *P.*
dubium has violet anthers up to April 1935 P.B.H.
has never found *P. dubium* in Mallorca.]

2-14-30 *Rosmarinus officinalis* L. Kn II 377 Bar ³⁶³
Bon 250. B.M. of C.P. 636. Shrub west of Cas Catala. Upper
lip of calyx slightly 3-toothed (see B.M. of C.P.). Calyx very
pubescent. (See 10-23-30)

2-14-30 *Asteriscus maritimus* Moench Kn II 467
= A. — DC. Bar 251. = (part) A. — Less Bon 170. FL.
Porto Pi. Foliaceous bracts more regularly ~~spatulate~~
spatulate than ill Bon. Achenes hairy with scaly
crown. ~~Petalobes~~ ^{leaves} ~~leaves~~ sharply 3-pointed. St
often purplish, hairy. Lvs with long white hairs
esp on back & edges.

2-14-39 RT *Sedum altissimum* Poir Kn II 42
Bar 182, Bon III Coast west of Cas Catala. Sterile
branches & dried infl with opened capsules.

L. Walt. very fleshy, flattish on top, rounded below. $3\frac{1}{2} \times \frac{3}{4}$ in, sessile, sharp pointed, glaucous green or reddish, close together & upright. Infl. st 12-16 in naked now but with lf scars $\frac{1}{3}$ - $\frac{1}{2}$ length at base. Fls in cymes, ^{1-sided} racemes. fls in about 2 rows on top of branch. Shortly pedicelled Carpel mostly 6, opened ventriday the dorsal rib terminating in linear appendage (prob style). Cannot see if filaments are hairy at base.

2-14-30 (A) ? *Phasmoson saxatile* Cass.

Composite. Seems to be *Gnaphalium* with exterior fls ^{filiferous} tubular & but heads are solitary on peduncles 3 in long. terminating short branches or axillary with a few bracts. St & peduncles woolly white, lvs densely so beneath & somewhat above. Lvs alt, arched, linear, 1 in or less, sessile & partly clasping, margins strongly revolute & perhaps not quite entire. Scales in several rows, scales yellowish brown. Receptacle ^{flat} naked. Pappus of few hairs. Achenes prob. pubescent. Base of achene a very hard coriaceous cap whose point of attachment to receptacle is not in exact center. St. woody. 2-24-30 Bellver. In all stages anthers show no signs of being tailed. Receptacle with not scales. Bracts in several

2-14-30

several rows, scarious, yellow brown, lance-linear, spreading & when seed is ripe, reflexed.

Several series of radial fls are ♀ filiform, tubular, white or very pale yellow. Disk fls ♂ tubular (of expected size) 5-toothed, pale yellow (style & stamens bright yellow). Achene 1 mm. long ~~cylindrical~~ brown ^{pubescent} with relatively long white hairs. Pappus ~~simple~~ white hairs about 7-10 in number, so slightly denticulated as to hardly show (20x)

Mr. Aeron calls this Phagnalon. It agrees with desc. of nothing else in Barcelo's & diff from desc. of Phagnalon. Barcelo's & Bonnier's only in that ♀ fls are filiform tubular & not filiform rays. If Phagnalon it must be *P. saxatile* Cass Knt 454, Bar 337, Bon 161

(See 11-14-30)



2-14-30 or perhaps 2-13-30. (B)

Composite general effect of plant much as above. Lvs rather smaller. But fls several shortleafy (or bracted) peduncles. All fls tubular & valvate. Anthers tailed ^{capitate} ~~populous~~ of hair in one series, finely barbed. ^{capitate} ~~Populous~~ Pappus naked & rounded. Achenes with out "Cap" as in (A), prob. pubescent. Scales with silvery yellow tips, ~~looser~~ than in (A) pubescent & glandular (yellow dots) below tip. Heads about 6 mm high, 3 mm across.

Pos? Helichrysum ~~stoechas~~ stoechas DC in one of its forms (See 3-4-30) the diff bet outside of fls & the rest not noted because all are tubular & of same size. ~~But in scales 3-4-30 not at all pubescent & glandular below tip.~~



2-16-30 *Cynoglossum cheirifolium* L. Kn# 301
Bar 325, Bon 225 Fl collected by Lucy Drew in
fields bet. Son Rapina & Génova. Fr too young to
see char. but beginnings of hooks or tubercles evident.
Fls wine colored (none old enough to have turned
purple) Scales of corolla darker than lobes & velvety.
Lvs white tomentose. (See 3-26-30)

3-20-30 *Serapias Lingua* L. Kn# 411, Bar 355
Bon 309. Col. by Mr. Heron. Bellver.
Lip 14 mm. widest part, middle lobe 6 mm. wide
Bracts somewhat - not much - shorter than fls.
Hump at base of lip inside has 2 thin tooth-like
projections at its base, the groove between becoming
indefinite toward the rounded front. Not jaws!
S. occultata Gay acc. to Bon whose desc. diff.
from desc. Bar. Div of hood more or less ^{slightly} separate
at very tips & lobes of lip upright & at least partly
hidden in ~~the~~ hood which might indicate
S. occultata as desc. Bar. - but note loci.
(See 3-14-30, 3-29-30)

~~*Ophrys fuciflora* Reicht Kn I 405~~
2-20-30 *Ophrys arachnites* Reicht Bar 460
~~Bon 312~~ ~~part~~ = *O. fuciflora* Reicht Kn I 405
Fls not seen, no lvs. & roots, picked up from
wrong side by Mr. Heron. Bellver

O. crachmites Hoffm Bon 312. Agrees with
desc. ~~Box~~ except as follows: Sepals whitish
green tinged pink with 3 (perhaps more)
green nerves - the middle one ~~at~~ most
distinct. Anther column is curved for-
ward so that pollen sacs are above smooth
spot in lip. The beak (if it is such) is very
short blunt & is no wise narrowed. Smooth
spot at base of lip is bordered with grayish
white & dull purple inside. - lip purple
brown in center, greenish around edges,
broad at base with 2 humps, convex, notched,
the edges of the broad shallow lobes rolled up-
ward, and between them from a little con-
vexity with longer hairs than rest of lip
& tiny, yellowish green broad & tipped ap-
pendix turned flat back on upper side of
lip. Petals Δ small, faintly pink, velvety.
Consider poss. of *O. tenthredinifera* Willd
Note that in withering sepals turn a much
deeper pink. 2-22-30 Col. by Mrs. Heron Bellver
to root or lvs. had sepals & petals more definitely
pink than 2-20-30 & lip generally lighter
but shape & other char the same. Dec 7-10-30
[3-⁶/₁₂ 13-32 This seems surely to have been
O. tenthredinifera Willd]

2-20-30 *Orchis morio* L var *longicornis* Nutt 400
Coll. by Mrs. Neron. Bellver St broken evidently

at ground. 12 in high. Lvs 4. elliptic, ~~sparingly~~ abruptly,
short-sharp pointed. Lowest $3\frac{1}{4} \times \frac{5}{8}$ in. becoming
small until uppermost bract like & rolled around
at. Fl 16 in rather open. Cylindrical spikes. Ovary
 $\frac{5}{8}$ in twisted, curved downward. Bracts more than
 $\frac{1}{2}$ as long, thin, faintly tinged lavender, greenish veins
faint, apex sometimes irreg or slightly notched.

Plainly *Orchis* because spurred ~~rather~~ and on
face of column, glands 2, pouch 1. Sepals & petals free
but forming hood. ~~Bl~~ whitish, tinged purple (darker
on outside with greenish nerve. Sepals ovate 7×4 mm
Petals narrower (sometimes 1 or both lacking) Lips
white (1 each had 1 tiny bright purple dot), strongly
convex with broad lateral lobes (not quite entire)
~~reflexed~~ and narrow middle lobe folded on itself (longi-
tudinally) so as to make short hook-like projection
Spur purple, $\frac{1}{2}$ in long, flat & widens to apex 4 mm.
Fl from tip of spur to tip of lip $\frac{3}{4}$ - 1 in long $\times \frac{3}{8}$ in
vertically $\times \frac{1}{4}$ in across. St. hollow.

O. morio L var *longicornis* Nutt 400 = *O. longicornis*
Poir Bar 457 might be considered esp "espolon
inflado en su apice" But lip not like *O. morio*
B.V.H. ill #997 & the lateral lobes are not "violado-
oscuro" St hollow with very narrow center.
See 3-19-30.

2-24-30 *Sesymbrium Iris* L. Kn II 20, Bar 33
Bon. 24, BvH, 36 (ill) Calle de la Infanta. Common
along roads but seeds are not "casi de res
cadas" & pods are certainly somewhat flat-
tened. Seeds very slightly tuberculate
Very like ill BvH. but consider *S. Erysimoides*
Dedl. St. lobes smooth but is somewhat hairy
(See 3-14-30) (See 11-7-30-30)

2-24-30 *Polygala rufescens*, Pourr. Kn II 141,
Bar 56, Bon. 40 (See BvH 39 (ill) for desc. of *P. vulgaris* L.)
Fl. Bellver, path near wall bet entrance &
S.W. corner. 3 in high branched at base.
Lvs linear, sharp, 1 nerved, thickish, slightly
revolute to 11 mm long. Fls in axillary racemes
Fl 5-6 mm long, large sepals with broad dark
(greenish-purple) center & white margins,
veins very indistinct, petals & crest bright
purple (or crest lighter & duller) (See 3-19-30, 3-26-30)

~~nerosa Benth~~

2-24-30 ~~Microseris~~ *Micromeria* ~~biflora Benth~~ var
Rodriguezii Knöchel forma *filiformis* Kn II 348
= *M. filiformis* Benth Bar 360. Fls young fr. Bellver.
(Collected also 2-13-30 back road to Palma & seems to
be common on walls etc.) *Micromeria* seems only
possible genus and "flores muy pequeñas"

[In light of 7-5-32 # 764A this was almost surely
M. Rodriguezii Freyre.]

2-24-80

pequeñas, blancas o rosadas" instead of "purpureas"
or "purpurinas" seems to point to *M. filiformis*.
6-12 in high, st woody at base with numerous
ascending branches. lvs very short pedicelled
to $\frac{1}{2} \times \frac{1}{4}$ in (but mostly smaller) ovate, entire,
pointed but not sharply, mostly rounded
at base, some (not definitely the lower ones)
almost cordate, nerves arco-ascending,
margins slightly revolute. Fl in short
ped. clusters in axils. Clusters shorter than lvs.
Calyx definitely (at least) 10-nerved hairy 4 mm
long. Corolla ^{outside of lobes as folded in bud hairy} seems about as long as calyx in
various spec. I have never seen corolla open.
Stamens on very short filaments included, the
anterior ones larger. As infl progresses, the
lvs of lower fl. clusters often drop & always there
is a tuft of lvs at top, where axils bear buds
that do not show so that plant looks as tho'
fls were borne below lvs or as tho' there was a
lfy shoot above fls. (See 2-25-30 for lvs in 3's)

2-24-30 *Seriola aethensis* L. Kunth 513, Ba 280.
Bon 104 Bellver bet ent. v s.w cor. St. slender &
often lobes simple because branch in very young
bud. Scales of invol. with long point. Fl with hairy
ring at base of blade. Purple on exterior rays

long as fl. matures
light. Beaks definite ~~but~~ very short at aestivation.
Rasp with 5 short sharp teeth. (See 3-14-30) (See 3-4-30)

2-24-30 ? ? *Sonchus tenerimus* L. Kn II 536
Bar 286, Bon 187. Bellver Fl. no refer fr. R + in
high, woody taproot. Smooth with shallow channels
young very lfy branches starting from lower
part of st. Lvs smooth, lighter beneath, pinnate,
the rachis winged. Each pinule toothed &
usually with 2 definite lobes near base.
Many of rachis attached to pinule on upper
side with small toothed lobe & pinule twisted
so that its blade is at rt. ls with this lobe. General
effect of lf more delicate & finely cut than
expected. Upper lvs clasping with pointed
toothed ears, the very uppermost at points where
infl branches consisting of narrow linear
lobe & sagitate base. Infl branched. Invol 1/2 in -
a little enlarged at base, ^{a little white woolly at base} bracts in about 2 series
of same length with a few smaller ones at base
dark smoky green with a few gland tipped
hairs. Receptacle flat, naked. Achenes prob
compressed, with 4 distinct ~~long~~ longitudinal
creases & transversely wrinkled. Beakless.
Pappus abundant of soft silvery white hairs
Denticulation as fine as to be hardly visible (20x)
(See 3-14-30)

2-24-30 *Ruta chalepensis* L. Kn II 140 =
R. angustifolia Pers Bar 94, Bon 63. Bellver,
near west wall. Old seed pods & lvs only.
(Perhaps *R. bractea* DC. by char. not observable
on this spec.) See 10-15-30 [6-3-32 var. *bractea* seen
for 1st time.]

2-24-30 *Emex spinosa* Campd. Kn I 431, Bar
403. Fls young fr. Bellver S.-w. Cor. = *Rumex tin-*
gitanus ^{Herz} ~~L. Bon 274~~ But plant seems entirely
innocua & in some clusters, fls in delicate
pedicels above. Lvs less fringed & usually more
cordate than in Bonill Acc't. Kn. not in France
& *Rumex tinigitanus* L. is something else.

2-24-30 *Leontodon tuberosum* L Kn II 528 =
Thrinia tuberosa DC. Bar 286 (see Bon 184) Bellver.
Lvs basal. Achene striate, transversely rugose.

2-24-30 *Accras longibracteata*, Reicht Kn. I 412
Bar 456 - Archis — Riv Bon 311. Bellver. Several
clumps near west wall. (See 2-4-30)

2-24-30 *Ophrys fusa* Link Kn I 408, B 462, Bon 313
(See 2-6-30) Bellver, very common. Glaucesc.

veiny lvs lie flat on ground with only 1 or 2
smaller bract-like lvs. on lower part of st.

2-24-30 *Chenopodium murale* L. Kn I 438 Bar 376
Bon 369 BVH 388 (ill) Roadside Calle Infanta. very
common.

2-24-30 *Capsella Bursa-pastoris* Moench Kn I 30
Bon 33, BVH 47 = *Thlaspi* — L. Bar 40. Roadside
Calle Infanta very common.

2-24-30 *Senecio vulgaris* L. Kn II 481, Bar 241
Roadside Calle Infanta.

2-24-30

See Composite A. 2-14-30. Bellver. / Thagnalon
saxatile Cass. Kn II 454, Bar 237, Bon 100

2-24-30. *Veronica agrestis* L. forma *prolata* Kn II 387
= *V. didyma* Ten. Bar 344, Bon 237 = *V. prolata* Fries
BVH. 349. (See 2-4-30) Sepals ovate asides BVH.
Roadside. Calle Infanta.

2-25-30. *Muscari racemosum* Mill Kn I 318
Bon 300 = M. — DC. Bas 440, BvH 480 ill. east of Senora
Tip of corolla white & recurved, upper fls brighter
blue & sterile. See S.C. & A. for dif from *M. botryoides*
Mill (see Bon for *M. botryoides* DC).

2-25-30 *Ranunculus Ficaria* L var *ficariaeformis*
Kn I 495 = See BvH. 9 = *Ficaria ranunculoides*
Morrish Bas 10; Bon 9. Peduncles Bellver.
Most fls radical (or at top of underground st. $1\frac{1}{2}$ in
high) but each peduncles bears lvs (a: 1 lf almost
as large as radical lvs; b, c, d: 2 opp. petioled lvs smaller
than radical; e, 3 ^{petioled} lvs in whorl; f, 2 opp petioled lvs
& in axil of one of them another peduncle with 2
petioled opp lvs at base) See BvH. Carpels slightly
concave at top with hairs* around rim [See 1-6-31 * for
meant stigmatic lines]

2-25-30 *Theligonum Cynocrambe* L. Kn I 423, Bas
425 Bon 283-4. ♂ & ♀ fls young fr. with above. Stamens
seem to range from 8 upwards — not many more in
cases counted.

2-25-30 ?? ^{*nevada Benth*} *Micromeria biflora* Benth var *Rodriguezii*
Knoche forma filiformis Kn II 848 = *M. filiformis* Benth

Bar 360. Rd encircling Bellver. Seems same as
2-24-30. No fls / branch (but several) had br in
green sterile branches. [In light of 7-5-32 # 764A This was
3's its whole length. M. Rodriguez Freyre]

2-25-30. *Smilax aspera* L Kn I 383, Bar 443, Bor 302
No fl or fr. Stems many sharp thorns. Lvs
armed on edges & somewhat on mid-rib.
Lvs $1\frac{1}{2}$ in $\times$ $\frac{3}{4}$ in. Tendrils present. Rd encircling
Bellver (See 2-27-30) (See 4-14-30)

2-25-30 *Echium calycinum* Viv Kn II 310, Bar 223
Bor 223. Fl. Rd encircling Bellver - near Kinora.
See 2-4-30. Plant often tightly perinate. Calyx
about $\frac{1}{4}$ in & corolla projecting hardly $\frac{1}{4}$ in
more. Stamens strongly included. Matter
of extra-axillary fl. not plain at this early stage.
Buds pink, the opening fls a clear light blue.
See 3-6-30

2-25-30 ? *Umbilicus vulgaris* L var *pseudulinus*
Knoc. II 45- *U. pseudulinus* DC Bar 184; Bor 112
(See Bor 4. *Cotyledon Umbilicus* L 165 ill). In wall
on rd encircling Bellver. Lvs & dried fr. so not
able to consider possibility of *U. horizontalis* DC. Bar 184.

2-25-30 *Hypoxis radiata* L. Kn# 508, Bas 278
Bon 183 Fl & young fr. Rd encircling Belloc. Fls
about 30. Ext. achenes as desc. Bas. int. ones winged
but in center some (perhaps too young) not winged
but with crown like the winged ones. Lvs basal,
deeply pinnatifid in closely set downward pointing
lobes, largest at top of lf. (See 3-4-30 # seabed)
(See 3-14-30)

2-25-30 *Crepis taraxacifolia* Th Kn# 517 (See
Bon Bon. 275 ill = *Barbarea* — DC. Bon 188 &
Crepis vesicaria L Bas 200) Fl. Rd encircling Belloc.
Seems only paras ident. since: receptacle is naked
pappus of hairs, not enlarged at base & plummy,
achene not as in *Chondrilla* or *Taraxacum*, not
compressed & not 4 angled (as in *Picridium* &
Aethioniza) Lvs mostly basal runcinate pinnatifid
2 ft to 2 ft. ridged & triapex branching with lvs
(clasping with rounded toothed ears) subtending
branches only. Invol. seems double, the outer of
broad ovate bracts with broad scarious margins,
loose & almost cup like at base of longer narrower
bracts. Stigmas all olive green, outer rays
purplish on back, inner ones all yellow.
Achenes with toothed longitudinal ridges & tapering
into long beak. (See 3-14-30)

2-25-30? *Quercus minutissima* L. Kn # 69
Bar III, Box 72. Rd encircling Bellver. Clearly D.
St. smooth (not at all viscid or pubescent)
No fls. Empty calyx of last season's fr very
young buds. Last season's fls seem to have
been in dense bracted spikes (perhaps terminal)
from the top of which new branches have grown
(See 10-15-30)

2-25-30 *Salvia verbenacea* L. (See 3-4-30) Fl
near Genoa. Calyx upper lip 3-toothed. Lvs very
rugose. Fls pale. Cf with (2-27-30 San Roca) also
calyx upper lip 3-toothed. Lvs not at all rugose
Fls dark, bright blue. N.B. Lvs more nearly
lanceolate than heart-shaped cordate x fls at
Corolla about twice as long as calyx.

2-25-30 *Raphanus Raphanistrum* L. Kn # 37
Bar 26, Box 24, BVN 51 Fl & unripe fr. Field just east of
Genoa. Fl white very distinctly veined purple. Fr
shows signs of being "en chapelet" Bon.

2-25-30? *Ranunculus*

No fls fr. with *Ranunculus Ficaria* L. etc. Lvs darker & much
more deeply cut than 2-27-30. See later if not
dissectum. ● with very ● short 2-fl ● peduncles.

2-25-30 *Papaver dubium* L. (See below)

[*P. pinnatifidum* Moir See 2-14-30]

2-25-30 *Papaver hybridum* L. Kn II 5, Bar 2/ Bon 13
Bon 20. (Cf'l with *P. dubium* L col. same place 2-25-30)
Fl. Rd encircling Bellver. Stamens with filaments
very dark purple, anthers white. Capsule "ovoid-
globulosa" (at least in fl.) Buds opened 3-2-30 had petals
light but less scarlet than *P. dubium* but fls seen
emerged in field "rojo-vinoso". Stigmas 7. Lvs
bipinnatifid in narrow segments not at all as in
P. dubium L. whose lvs (as 2-14-30) only slightly divided
Lvs rough hairy (See 3-17-30; 3-26-30 anthers in bud light
blue stigmas 8.)

2-25-30 *Diplostaxis erucoides* DC. (See 2-18-30)

Field east of "Lima". "Pico" often found to be "monosperma"
in su base

2-25-30 *Euphorbia helioscopia* L. (See 2-4-30) Pod
smooth, seeds pitted. Rd encircling Bellver.

2-25-30 ? *Asteriscus spinosus* Griseb. Kn II 470
Bar 252, Bon 170 Rd encircling Bellver. St $3\frac{1}{2}$ -3 ft high
with remains of last yrs. infl at top & young shoots
with buds below. Invol fls as dead, the lvs spiny
pointed (but not prickling at this stage) Radial achenes
3-sided, 2-winged, ^{smooth} disk achenes, ^{not 3-sided} wing on one

side only (the side not clasped by scale) & hairy
on side covered by scale. Scales stiff, pointed at
tops. Pappus a short scaly crown. (See 4-18-30)

2-25-30 ~~Ilex~~ *Quercus Ilex* L. Kn I 417, Bas 457, Bon
286, B.M.Q.C. P. 231. No fls. Pl. encircling Bellver.
Many trees badly infected with some sort of disease
— perhaps scale. One tree with entire lvs but shoots
at base which had holly-like lvs. All lvs. collected
densely tomentose beneath, more or less starry &
very lightly starry tomentose above. See Kn II Pl
XXXVII for diff shapes of lvs. (See 3-14-30.)

2-25-30 *Picridium vulgare* Desf. Kn ^{II} 535, Bas
387, Bon 188. Pl. encircling Bellver. (Note P. — Desf
Kn inc. *P. intermedium* Schtz. Bas & acc. to Bon
has the outer invol. scales heart shaped & acumin
on margins etc as desc. for *P. intermedium*.)
Also all fl have stigmas, achenes in center of
disk seem not to develop.

2-27-30 *Borrago officinalis* L. Kniff 303, Bar 319
San Roca. Bon 220, BVH. 326, BMJCP. 622. Filaments
broad & ventricose, with linear appendage just
behind anther & almost half its length. Petals
bears sharp little tooth at apex.

2-27-30 *Incerus coccifera* L. Kniff 418, Bar 427
Bon. 386. Fr. Herbicide San Roca. Lvs absolutely
smooth & shining both sides. Cup bristly with
^{thick} lanceolate downward curving tips of scales.
(See B.M.J.C.P. 231 for desc. of *C. Ilex* L. with lvs. tomentose
beneath, scales thin & appressed.) (See *Riviera Nature*
Notes 57 = *Kermes* Oak vis host of insect which yields ^{dye} crimson)

2-27-30 *Cistus monapeliensis* L. (See 2-14-30.) With
above. Fls last yr's.

2-27-30 *Torilis nodosa* Gaertn. Kniff 228, Bar 194
Bon 125 = *Caucalis* — See BVH. 207 (ill) San Roca.
(See 4-10-30 and 12-10-30 #623.)

2-27-30 *Geranium molle* L. (See 2-4-30) Fl. Fls not old
enough to show char. San Roca.

2-27-30 *Erodium moschatum* L'Her. (See 2-4-30)
Son Roca. Fl & fr. Thought to be same as 2-4-30
lf like ill Bon 59 & B.H. But note bracts are
scarious & hairs on carpels yellow ^{-brown} & sepals
with thick points 1+ mm long above their
rounded apices. No odor of mink. Consider
possibility of *E. cicutarium* L'Her.

2-27-30 *Veronica Cymbalaria* Boiss & Kun II 387 ³⁴³ Bas
Bon. 237 Fl & unsp fr. Son Roca. Fl pure white,
some lvs purplish beneath.

2-27-30 *Lavatera arborea* L. Kun II 176, Bas 77, Bon 56
B.H. 89 ill. B.M.Q.C.P. 485 Fl. End of hamline Son Roca
in garden. See #12-5-30

2-27-30 *Coronilla glauca* L. Kun II 110, Bas 148, Bon
90, B.M.Q.C.P. 416. Fl. in garden on hill Son Roca.
There would be no question except that stipules
the small are rather ovate-lanceolate & not marked
by caducous, and one very noticeable char. not
mentioned, i.e.: of lvs which and leaf peduncles
the stipules are broadly rounded 8 mm high x 11 mm
broad, almost entire with minute point at apex
Calyx & floral parts strongly resemble *C. filinea* L. 3-4-30

2-27-30 *Salvia verbenaca* L. (See 2-4-30 &
2-25-30) Fl. Son Roca. Lvs not rugose. Fl. bright
dark blue. Calyx upper lip 3-toothed.

2-27-30 *Hedyscopia polymorpha* D.C. Kunz 509, Bon 193
See Bar 277-8. H. — D.C. var *rhagadioloides* Willd.
Heads nodding in bud are upright in fl. Not H.
subaeformis ten. since it is practically smooth
not "áspera y cubierta de cerdas gancludas"
Bracts involucre smooth, not "pelicizados por
su dorso". Peduncle somewhat enlarged at top.
No rosette basal lvs. Many ^{diffuse} 2-branching at issue
from crown root. Achenes (more ripe) per. rough
on ridges. Ls. rather sparsely hairy with hairs
often bifurcated at top. Plant light yellowish green.
Bet. La Vileta & Son Roca. (See 3-17-30)

2-27-30 *Parietaria officinalis* L. Kunz 422, Bar 425
Bon 284, 30 ⁴¹⁴ H. ⁴¹⁴ Wall bet. La Vileta & Son Roca. Native
woman says it is very good as medicine (stomach?)

2-27-30 *Solanum sodomaeum* L. Kunz 363, Bar
329 No fl. fr. Near Son Roca. Lvs armed on veins above
as well as ^{beneath} ~~below~~. Hairy hairy above but not as densely

so as ~~be~~ beneath (See 4-14-30)

2-27-30. ♀♀ *Rhamnus alaternus* L. Kn # 170 Bar
98, Bon 64. (See BVH 103 and BMJC. P 474 for desc of
genus) Fl ♂ with what seems rudiments of ♀ organs
Hillside Son Roca (may be cultivated.) Shrub per ♂
not more than 5 ft. Lvs alt as desc Bar & Hill Bon.
Fls in short axillary racemes (shorter than lvs)
No petals. Calyx with definite tube & 5 lobes that
fold toward center with edges touching in bud
& are reflexed in anthesis. Stamens 5, pro-
jecting, alt with sepals & inserted just below
mouth of tube. (No fleshy disk lining calyx
tube apparent) Ovary seems 3 celled
(fr. likely to be 3-angled) with 3 stigmas.
St. ? infl. drops away readily, the little bracts
which form cup like (shelf-like) depressions
for the pedicels seeming to be part of stem, not
at all detachable. (See 3-11-30) See 3-14-30, 3-19-30, 4-20-30
fr.

2-27-30 *Andropogon hirtum* L. Kn I 285
Bar 489, Bon or perhaps A — *L. longearista-*
tum Willd (Bar) = *A. pubescens* Vis. (Bon)
Blades not hairy (the venation are roughened
like the edges) except for a very few long hairs

2-27-30

hairs at very base. Sheaths entirely smooth. Ligule about 3 mm, short laccate, fringed at top, more or less silky pubescent on back. In each spike the lowest pair of spikelets ~~the same~~ (both almost sessile) seems σ , the succeeding pairs as stamens. Awn is clearly 4x length of σ spikelet & seems often longer. (See 2-17-30.)

2-27-30 *Orchis tudentata* Scop. (See 2-6-30) Hill side San Roca. frequent.

Cont. III 133 (ill)

2-27-30 ^A *Ajiuga* Sw. Schreb. Ku II 313, Bas 371 Box 256
Bud & young fr. Bet La Vileta & San Roca or at San Roca
St to 8 in high white wooly. Lvs of sp. ^{linear, sessile} $1\frac{1}{2} \times \frac{1}{8}$ in or slightly wider at apex. entire except for few low distant teeth toward apex, edges slightly revolute, long white hairy both sides. Internode $\frac{1}{4}$ in. Stipules none, the opp. lvs forming indistinct ridge around st. St. does not seem sq. Fls solitary, sessile in each axil. Calyx hairy. 5-toothed. Ovary free, distinctly 4 lobed. Style short prob 3-4 divided at top. Corolla delicately membranaceous gamopetalous, not seen developed but prob very small with 4 stamens attached at very top. Dried remains found on developing fr.

See A below.

2-27-30 *Senilaxarpera* L. (See 3-25-30) Asdes 2-25-30
but with much fr. red. Son Roca (See 4-14-30)

A. (accabon) Same plant collected 3-11-30 Establimento
The 4 parts of ovary are attached more than half their
height but break apart readily, each 1 seeded.
oblong about $2\frac{1}{2}$ mm high $\times$ $1\frac{1}{2}$ mm wide. Under
a smooth skin they are corrugated or pitted
on back. If "corolla" really is such this should
be a Labiate or consider the slight possibility
of *Mercurialis tomentosa* L. Ber 419
4-18-30 Seeds black. flat on 2 faces & rounded on back
at top. 3 mm long.

2-27-30 *Chrysanthemum coronarium* L. (See 2-4-30)
Son Roca Fl. Rays all yellow

3-4-30 *Galactites tomentosa* Moench. Kunt 503.
Bar 362, Bon 174 Highway west of Cas Catala. Fls. not
white or very pale rose, Disk fl. yellowish at top. Tube.
Ray fl. large, radiant with narrow, long divisions.
Stamens green-blue. Fr. not advanced enough to
show char. well. Receptacle with long white
hairs (But see Bon 151 middle of page) (See 3-30-30,
VH-5-30)

3-4-30 *Silybum marianum*, ¹⁰⁹³ ~~Laetia~~ Kunt ^{East end} ~~269~~ Bar 363
with above. Thistle like plant with white spotted lvs
& purple fls. St to 2 1/2 ft branching, ribbed, not at all
winged with decurrent lvs, silvery green, arched
at very top. Lower lvs large
sinuate lobed & prickly on margins, entirely smooth,
silvery green with broad white mid-rib, broadly
marked with white around veins above (veins
whitish beneath but the broad white blotches do
not show beneath) Upper lvs similar sessile
partly clasping with rounded very prickly lobes.
Leads solitary, ^{indefinite peduncles} leads with downward curving
leaf 1 1/2 in long. Tip prickly dentate at base & prolong-
ed into stiff, channeled point with yellow
thorn at tip. The innermost bracts ^{upright} without
spines & colored purple at tips. Fls all the same, abrupt-
ly swollen to globular shape at top of tube where
stamens are attached. Filaments seem to be

easily separable. Filiforme appendages at
base of anthers very oblong. Acc to Bar. the
only thistle-like plants with white spotted lvs
are: *Galactites tomentosa* Moench p 262

Tyrinnus leucographus Cass p 262

Sylvestris marianum Gaertn p 263

Notolasis squaca Cass p 265

Rechenes smooth with serrated round pappus
which is not plumose but is rather more
than dentate. Receptacle fimbriate as in
above. Rosa callotris Cort de San Juan
because on the day of San Juan the blowing
away of seeds prove something (probably if will
be married)

Bon 174, ~~Bon 260~~, BMGC.P. 793. All Bon 151 hardly any-
ways shape of bracts. but Bon #558 is very like in all respects
seeds very dark shining, bristles in several rows on
convex projection (disk) = *Carduus Marianus* L
Bon #260

3-4-30 *Moricandia arvensis* DC. Kn II 37, Bar 32
Bon 22 Fl & fr. Porto-Pi. Pods only 4 cm.

3-4-30 *Smyrnium olusatrum* L Kn II 229
Bar 212 Bon 135, B.H. 310 (ill). Fl & young fr. Near
Puerto Andraitx. Note infl. repeatedly branching
cymose; petioles: broad, thin ribbed, sheathing,
with papery margins which when young
are woolly on edges; cut stem with pleasant
odor faintly suggestive of *Angelica* but differ-
ent.

3-4-30. *Adonis annua* L var Kn I 496 Bar 8
Bon 6, B.H. 5, BMQC, P 273 Fl & unripe fr. ^{Field along} Highway
east of Andraitx. Ped. G. - 1 var *dentata* Kn II -
A. microcarpa DC. Bon 566. because of distribution.
Sepals are "purpureo-negruzcos" is desc for *A.* -
var *autumnalis* F. v. P. and small hump on
back of achene just below base of style might pass.
be "concl. brda superior gibosa hacia el medio"
Sepals 5; petals 3 red (seems mostly nearly
blood red than fire red) with dark spot at base.
Pist. of achene very little curved. In the other hand
the hump on achene maybe "un solo diente muy
ancha y aproximado a la base del estilo" and

points are somewhat blackish but achenes not "profundamente arrugados" but almost smooth at this stage. Achenes gibbous in front about middle. Sepals more or less ciliate at very base. (See 3-12-32)

3-4-30 *Veronica hederaefolia* L. Kn II 387, Bar 343
Bon 237, B & H 348 Fl & young fr. Edge of field just
north of Puerto Andraitx. Cfd with *V. Cymbalaria*
2-27-30. Pod smooth. → *V. hederaefolia* is more
hairy in general effect, is smaller with fewer
lobes & middle lobe much more conspicuously
the larger. Fls usually whitish or white
but sometimes blue ones on same plant.

3-4-30 *Adiantum Capillus Veneris* L. Kn I 262
Bar 524 Very young fronds (or perhaps stunted)
in wall of well just north of Puerto Andraitx
No spores.

3-4-30 *Chrysanthemum coronarium* L. See 2-4-30
Rays creamy with yellow center. (Cfd with spec
with all yellow rays 2-27-30 Son Roca) Field west
of Andraitx with *Adonis*.

#194

3-4-30 *Senecio lucida* Camb. Kn II 60, Bar
106. Fl. no fr. Covering a hill side on rd to Andraitx.
Shrub to about 3 ft. (perhaps more). Branched &
spiny. Lvs except on the short fl. branches. Bark
gray & shreddy. Branches & spines green (not
shining) furrowed, more or less pubescent
with short appressed white hairs. Main stems
bear spines & also branches which branch again
& again. The ultimate branchlets ($1\frac{1}{2}$ in long) are
spine pointed & bear alt spines $\frac{1}{2}$ - $\frac{3}{4}$ in long, often
not more than $\frac{1}{2}$ in apart. Old spines have what
seem at base of lf at base & on fl. st. young spines
are growing in axils of lvs. Fl. stems at tips of
branches about length of spine (or a little longer)
grow at base of spine on the out (down) side. Lvs about
6 mm long lanceolate or obovate-lanceolate, entire,
more or less covered with short appressed brown
hairs as is also fl. st. & calyx. Stipules very small,
joined at base with 2 short awl-shaped points.
At base of fl. st. there seem to be 2 opp lvs. rather shorter
& broader than others & a third placed between
them & so slightly above as to give effect of 3-
foliate lf. The other few (2-4) lvs on fl. st. are clearly
simple & alt. & bear young spines in axils. Fl.
(about 4) in axils of linear bracts on very short ped-
icels which have 2 linear ~~st~~ bracts at top. Calyx 5-
divided to below middle into linear lobes, the

lower lobes rather longer than the upper & the upper sinus broader than the others giving calyx a slightly oblique effect (but hardly bi-labiate). Fl $\frac{1}{2}$ in or all. standard, not erect, strong, about as long as narrower wings but shorter than keel. Corolla yellow with few rusty hairs like those on calyx on back of standard & on keel. Keel straight, falling downward in maturity so as to expose the monodelphous stamens & slender style which seems to be articulated below the slightly upward curving awl-shaped apex. Ovary smooth at base with stiff white appressed hairs at apex. 7 ovules in one studied. (See 3-30-30)

3-4-30 *Eruca sativa* Lam Kn II 23 Bar 28 Bon 21 B.M.C.P. 309 Fl & young fr Field bet. Andraitx & Palma. Pod not articulated, cotyledons conduplicate (not *Carichtera* or *Succowia* see Bar 25) so prob. pod (now 7mm + 8mm of beak x 5mm wide) still when ripe & proportionately longer. Seeds many in 2 rows. Basal lvs thickish glaucous with white midrib, petioles purplish, rough with hairs on midrib esp below beneath otherwise ^{almost} smooth, runcinate pinnatifid. Basal lvs gone except in earliest fl. St purplish hirsute. St. lvs few small, to $2\frac{1}{2}$ in, deeply

3-4-30

pinnae into narrow sometimes toothed segments (tho see Bon 17. N.B. Alf. suggests Bonill P.A.). - lateral nerves of fr. (Bar.) not evident. Fr. plump with septum as wide as narrowest dimension.
(See 3-26-30)

3-4-30 *Cistus salvinaefolius* L. Kn # 195 Bar 47
Bon 35. Bud & last yrs. fr. across the rd from above.
Clearly *Cistus* because pod 5-celled. No odor of ~~leaves~~
balsam noticed. anthers bright orange (See 3-30-30)

3-4-30 *Reseda lutea* L. Kn # 39, Bar 54, Bon 38, BVH.
53. Early fl. Roadside bet. Andraitx & Palma. 2 petels
linear ^{from a broader base} the other 4 with a broad base which curves
over the disk & 3 segments rising below the apex
of this base, the 2 outer ones broad & obliquely
fan shaped, the middle one shorter & slenderly
linear (exactly as in ill # 115 BVH.) Lvs. consisting
mainly of winged petioles (or mid-ribs) 3 divided
at top of these ~~middle~~ divisions again divided
into 2-3 or more narrow segments. Styles 3.
Calyx lobes 6, very narrow. disk pubescent. "asperezas"
on stem consist of small callus-like more evident to
touch than to eye. Very slightly apparent on lower
(See 3-17-30)

3-4-30 *Vinca media* Hfgg Lk. Kn II 200 Bar
309, Bon 312. Fl. Along stream from Antraitx to
Puerto. (See BVH 309 & B.M.J.C.P. 605 for desc. of *V. major* L.)
Thudif. from *V. major* in that ^{linear} calyx lobes are not
at all ciliate & lvs not ciliate. Dif from *V. minor* L
(as remembered) in that fl stalks sturdier & taller, to
12 in, lvs yellowgreen, ovate, rounded not
narrowed at base. Corolla $1\frac{1}{4}$ in wide, pale
blue, lobes not esp. "aigus" (Bon). Sterile tracking
at. not noticed (See 3-14-30, 11-17-30)

3-4-30 *Populus alba* L. Bar 428, Bon 389, BVH 428
B.M.J.C.P. 225 ♂ fl. Rd bet. Andraitx & Palma. Stamens
6 Rachis woolly, scales jagged & long ciliate. Catkins
at tip greenish red, tube towards base yellow.

3-4-30 *Coronilla juncea* L. Kn II III, Bar 148, Bon 90
Fl. Puerto Andraitx behind "Ambraters" (See 3-26-30)

3-4-30 *Lotus Creticus* L. Kn II 97, Bar 131, Bon 81
Fl on rocks above bay behind "Ambrusters" at Puerto
Andraitx. Matted ^{trailing} slender st. to 2 ft, the lower
half naked. Petioles 3+ mm long, stipules 9 mm long
but ovate rather than oval lanceolate, and oblique
(see L. A. Ilinii Desf. Bar = L. Creticus L. var. cyrtoides Kn)
The 2 lateral calyx lobes much shorter & rounder
than the others. Wings much longer than keel but
not entirely covering it at base. Standard with
edges rolled backward making it look narrow,
lightly veined brownish. Central lft 10 mm long.
Another spec. in same locality (no fls) seemed a miniature
with central lft 5 mm or less long (see 4-14-30)

3-4-30 *Coronilla Scorpioides* Koch. Kn II 100 Bar 148 =
Scorpioides Matthioli Dod. Bon 90 Fl. Puerto Andraitx
field behind "Ambrusters". Exactly as ill Bon 66. Ped-
uncles not quite as long as lvs. Upper lip of calyx
longer than lower, slightly hooded notched. (see
3-30-30)

3-4-30¹ *Lotus edulis* L. Kn II 90 Bar ¹³² ~~842~~, Bon 81
Fl near above. Thickish taproot & remains of
runners (underground st. see Bon) prob also
new runners developing. Diffuse. Calyx with
purple vein in each lobe & otherwise purple
tinged. Corolla yellow, standard purple,
veined, wings slightly so. Keel purplish.

stiffish

Brown at tip. General effect much like
L. angustissimus L. is all BWH #367. which
considers. Fls solitary or often in 2's. Stipules
broadly ovate, more or less oblique, ^{or} the ^{or} keels at
base looked almost cordate (see 3-14-30)

3-4-30 ^A *Silene*

Fl & young fr. Puerto Andraitx or toward "Am-
brusters". 5 in high from strong white taproot
(form) branching seems to indicate taken
from wall. Branched 16 from base. Stems
green or reddish, with appressed downward pointing
white hairs. Lower lvs spatulate to 1+ in x $\frac{1}{4}$ in,
pointed, pubescent, ciliate at base, often purplish
toward tip. Upper lvs narrower to linear (not
opened flat. The largest branch dichotomous.
Bracts 2 at base of each pedicel, awl-shaped, ciliate.
Fl 2-4, peduncles 2-4 cm., pedicels 4 mm or much
less. Calyx to $\frac{11}{16}$ mm, enlarging somewhat toward top,
teeth 3 mm, markedly ciliate. 10 purple-brown
anastomosing at apex. Calyx ^{or} the pubescent
~~lower~~ ^{on veins} hairs ^{purple} enlarged base but
no part of calyx viscid or glandular. Corolla
small 10 mm across, very pale pink, petals
3-parted, sepal white 2-lobed, claws exerted
about 2 mm above calyx tips. Stamens just

3-4-30

just visible at throat. As pods mature, Calyx grows larger at top, tips closing over capsule at this stage. The most advanced fr. is ovoid 6 mm x 5 mm on stalk 5 mm high, 5-ripped & pubescent. Ovule reniforme, flat on sides, grooved on back, otherwise smooth. Infl. not noticeably scorpioid 1-sided. See *S. decumbens* Bern Bar 569 which part is inc in *S. sericea* all forms and *quadrifida* Kn I 469. (See 2-13-30 for the same). Calyx somewhat umbilical [Perhaps same as # 624 of 3-23-32 which Kew identifies as *S. sericea* A.C.]

8
3-4-30 *Silene*

Young fr & buds. Puerto Andraitx or toward "An-brutis". St 8 in simple but young & branch at lower nodes, pubescent with short white hairs with enlarged purple bases, not appressed as in (A). Basal ls. almost in rosette, spatulate to $1\frac{1}{4} \times \frac{3}{8}$ in, often purplish, with stiffish white hairs (some with enlarged purple bases) esp. beneath. Firmer than (A). Lvs on the young branches similar green, very long ciliate at base (not linear as in A). Infl. scorpioid 1-sided, fl almost sessile, the lowest fl $1\frac{3}{4}$ in below the 3rd, the rest close together. Calyx 11 veined & some veins purplish but not the distinct handsome markings of (A) more coarsely pubescent than (A). Petals

rudimentary, shorter than calyx in all cases shown on this plant & about as long as ovary when stamens ripen. Petals greenish-yellowish, divided at top, scales very rudimentary. Ovary narrowly oblong, 3x length of st. In ripe seeds reniform, back broad & corrugated transversely, the sides so hollowed that the back should probably be called winged. Bracts lanceolate. Calyx not at all umbilical.

3-4-30 *Plantago Coronopus* L. Kn II 406, Bon 259
B & H 380 (ill). Bar 381 (var. not determined) Last seasons
without fls. Puerto Andraitx.

3-4-30 *Galium saccharatum* L Kn II 425 =
G — All Bar 233, Bon 142 Fl & young fr. Puerto
Andraitx, field at top of wall back side of town. St
6 in high branched only at very base. Lvs in 6's,
8 mm long (See 3-11-30 and 5-17-30)

3-4-30 *Scandis pecten-veneris* L. (See 2-4-30)
Fl & unripe fr. Andraitx Puerto. Some umbels
simple, some with 3-4 umbellets.

3-4-30 *H. yoseris* ^{*scabra* L.} ~~*radiata* L.~~ (*H. radiata* L.) (See 2-23-30) Puerto
Andraitx. Kn # 509, Bar 279, Bon 183 ill exact. Fls
11. Lvs suggest those of *H. radiata* but instead of pointing
downward are oblong at tip to midrib or slightly
pointing upward (See 3-14-30)

3-4-30 *Seriola aetnensis* L. (See 2-24-30) Puerto
Andraitx Fl.

3-4-30 *Sonchus oleraceus* L. Kn # 588, Bar 286,
Bon 187, Bon 273. Fls fr. Andraitx Puerto. Fls pale
yellow.

3-4-30 *Hyoerymus albus* L. Kn # 364, Bar 332 Fl.
Dump at Puerto Andraitx, Corolla limb light greenish
yellow, upper part of tube dark purple, filaments
purple hence = *H. major* Mill. Bon 327. (See 2-13-30)
Erob. odored.

3-4-30 *Erodium cicutum* Willd Kn # 130, Bar 83, Bon
58 Fl valvate up fr. Andraitx Puerto. Diff from *E.*
malacoides in having lvs deeply palmately
lobed into 3 div, the lateral ones less deeply 2-lobed

the cuneiform terminal one still less deeply 3 lobes, with irreg rounded teeth. Lf cordate at base. Pedicels & Calices hairy but not glandular but filaments of sterile stamens only slightly if at all ciliate

3-4-30 *Lathyrus Cicera* L. Kn II 24, Bar 145, Bon 88 Fl & young fr. Field bet Andraitx & Palma (was this the purple fl. seen ^{clawing} in fields of white fl'd peas?)
(See 3-17-30 x) [Probably the purple fl. in fields of peas was merely *P. sativum*. See Bar 143 for color. Frequently seen later this the white fl. predominates]

3-4-30 *Vicia Faba* L. Bar 139, Bon 85, B.M. J.C.P. 391
Fl. common in cult

3-4-30 *Helichrysum stoechas* DC. Kn II 456
Bar 256, Bon 173. Fl & fr. with *Cistus salvirefolius*
on id bet. Andraitx & Palma. (See dif statements Bar, Bon
& BvH as to involucre of *Helichrysum* & *Knaphalium*)
(See also Filago BvH 238-9 ill & *G. luteo-album* L. BvH 240
ill none of which this spec. is) Plant has sweet herbiac
smell. Over 1 ft high. Scales of invol. silvery yellow
Prob plant 4 in high with sterile branches bearing
lvs so crowded as to be overlapping is the same
Andraitx Puerto near "Andraitx". (See 2-14-30 B.

3-4-30 *Helianthemum laevipes* Pers Kn # 204 =
Fumana — Spach Bar 51 Bon 36. Bud
Puerto Andraitx towards "Ambruster" (See 3-30-30
(See desc. Cont. I 151

3-4-30 *Orchis tridentata* Scop. (See 2-6 and 2-27-30)
Puerto Andraitx on road towards "Ambruster" fre-
quent. (A) gen effect pale. (B) so thickly, highly
spotted that gen effect almost purple.

3-4-30 *Alphrys fusca* Link (See 2-6 and 2-24-30)
Puerto Andraitx towards "Ambruster" common.

3-4-30 *Piccidium tingitatum* Desf Kn II 583
Bar 388 Fl. Puerto Andraitx prod in dump at so.
end of town. Cf'd with *P. vulgare* 2-25-30. v perhaps
only a form of that. Plant much coarser. Lvs much
thicker v deeply divided (instead of finely sinuately
toothed, midrib very wide, peduncles thick (in-
stead of slender), lobes bracts with cordate bases v
several rows have the white scarious ^{with wing on back} ruffled mar-
gins with outward curving tips (instead of only
a few outer bracts much slanted than the rest. Scarious
margins) Inner bracts with rounded
ciliate tips & some with a very definite wing

projecting just below tip. (Similar wings
smaller & inconspicuous on back of *P. vulgare*)
Rays yellow, purple at base. St & lvs freely glandular
with waxy globules.

3-4-30 ? *Salsola Kali* L. Kunth 444, Bar 399 Bon 370
B & H. 386 (ill). Dried st. with fr & floral lvs only but
ident. almost certain. Puerto Andraitx.

3-4-30

No fl or fr. Dump road end of Andraitx Puerto & same
as *blaucium flavum* Cr. 4-18-30

(A)

3-4-30 *Lavatera cretica* L. Kn II 177 Bar 77. Bon 56. Bud & young fr. Rd bet Andraitx & Palma.

St rough (almost encrusted) with starchy hairs. Lvs, calyx etc all starchy haired. Fls more than 1 in axils & buds just before opening strongly reflexed. Stamen tube hairy at top but not ~~in~~ ~~finite little stamens~~ (B), the 3 bracts unquestionably united. Lvs differ from (B) in being more deeply 5-lobed (outline a little like maple lf.). Fls ~~purple~~ lavender with darker veins, much lighter than (B) (see 3-11-30)

(B)

3-7-30 *Malva sylvestris* L. Kn II 179, Bar 76. Bon 55-304. 90 (note lvs. are rounder & more shallowly 7-lobed than ill #197) Collected by Mrs. Hillier near Son Rapina. Hairs on st & lvs tho often starchy (esp. on lvs) are longer, looser, fewer & softer (imparting no encrusted look or feel). Corolla $\frac{1}{2}$ in broad, petals purple with deeper colored stripes. Bracts of invol not united as (A) tho sometimes one or more edges slightly united

8-10-30 *Echinum Calycinum* Viv Kn II 310 Bar 323 Bon. 229. Fls unisexual. Terrene (see 3-4-35-30)

Lower fls are extra axillary and sepals grow larger as seeds mature. Note bracts are not narrow at base & might almost be considered sub-cordate. Style

pubescent

3-10-30 ? *Rhagadiolus stellerus* DC. Kunth 512, Ber. 279 Bon
183. Fl. Vacant lot east end of Calle de la Salud. $2\frac{1}{4}$ in
high. Head $\frac{5}{16}$ in high, invol bracts 7, linear with
shiny hair down center, with very small broad-
ovate, pointed bracts at base. Receptacle naked, pappus
none. Lvs not as desc. Bas. but oblong-spatulate,
very slightly sinuate-dentate. Lvs v. pubescent.
* St bears a lf shortly below fl with fl. bud in
axil. (See 3-17-30)

3-10-30 ? *Jasminum nudiflorum* L. noll B.M.J.C.P. 595
(in cat. Casa Keyrat, Valencia) Fl. Garden Infant 8.
Trailing along walls. Diff from desc. B.M.J.C.P. in that it
is weak & trailing. Of the 3 lfts, the center one is
oval or lanceolate to div, the lateral ones obliquely
ovate to $1\frac{3}{8}$ in, the base wedge very short, ^{cut} stiff,
closely appressed upwards, rough to touch.
The short ($\frac{1}{2}$ - $\frac{3}{4}$ in) fl. branches axillary (often
the lvs have fallen in flowering portion) & 4 to
formed both above & below. Flat. Bears 1 or more per
small lvs or bracts but these can hardly be called sub-
tending. Corolla yellow, more or less tinged reddish
outside, double, $1\frac{1}{4}$ in wide, tube $\frac{1}{4}$ in long. No odor.
Lvs rounded somewhat notched

3-10-30 ? *Jasminum grandiflorum* L. B.M. CP 596
(See Kn I 58 & Bar 309 Fl. overhanging wall on so. side
Calle de la Salud, ~~road~~ eastward of Infanta E.
St. hardly angled. Lvs opp. lfts 3-7, the upper ones
not always distinct, much darker green than
above. Fls in open clusters, single. Corolla 1 in
across, tube $\frac{1}{2}$ in, white, tube & outside of 2 petals
red. ^{Calyx?} Fragrant Corolla very short, lobes narrow
linear not more than $\frac{1}{8}$ in, sinuses wider
than lobes [See 6-2-34 for f. *officinale* L.]

3-10-30. 1 ? *Mesembryanthemum cordifolium* L.
B.M. CP.
257. (See Kn I 51) Fl. Edging plant Infanta E.
Lvs thick, ovary 4-celled. Petals light rose purple. Styles 4
Fl. compressed $\frac{1}{2}$ in one way $\frac{1}{4}$ in the other, when closed
in subglobose circulate $\frac{3}{8}$ in diam. Petals united
at base, stamens perhaps merge into petals. Capsule
loculicidal

3-10-30 *Ruscus Hypoglossum* L. Bar 443, Bon 302
(See B.M. CP. for desc. of genus) ♀ fls. Garden Infanta E.
Cladodes not spine tipped as in *R. aculeatus*,
but only 1 nerve shows faintly in bract subtend-
ing fl cluster. A dark purple tube surrounds
pistill (perhaps rep. stamen tube in ♂ fls)
Cladodes to $3\frac{1}{2} \times 1\frac{1}{8}$ in firm & stiff but often drooping
(i.e. curved downward from about middle, pedicels
not thickened. Fl. bract definite to $\frac{1}{4}$ in long). (See *R.*
aculeatus 4-20-30) See 4-10-30

3-10-30 † *Anthemis arvensis* L. Kunt 472 Bar
347, Bon 167, BVH. 248 Ill Dump east end of Calle de
la Salud. Very early fl & bud. achenes undeveloped.
Crushed lvs. have odor faintly suggestive of *A. thula*
but not unpleasant. Stems smooth below but
silky pubescent above as are lvs. (See 4-20-30)

3-10-30 *Centaurea aspersa* L. (See 2-4-30) Bud
Dump east end of Calle de la Salud.

3-10-30 *Erodium moschatum* L'Her (See 2-4-30)
(See 2-27-30) Fl & fr. Terreno See B.M. J.C.P. 434. fr. def bet this
an *E. cicutarium* L'Her. This has st. light green
not at all red, large white membranaceous bracts
stipules, fertile filaments broadened at base with
often an upward pointing tooth at top of wing on
each side but sepals are tipped with 1 or 2 bristles
no larger than the hairs on sepals & entirely like
them.

3-10-30 † *Fumaria capreolata* L Kunt 8, Bar 23
Bon 14 BVH 23 Terreno prob. Calle de la Salud. Fls white;
the lower ones tinged purplish on back, tips very dark
- green outside, purple inside; 10 mm long including spur

3-10-30

spurs. Tips narrow looked at from below. Sepals as broad as corolla & $\frac{1}{2}$ as long from point of attachment. Main st. 10 in high, twisted, strongly angled. Pedicels look as though might be twining later but are not now.

3-10-30 *Hordeum murinum* L. Knt ³³³ 511 Bar 511
Bon 368 BVH 546. Calle de la Salud. Outside glumes of
3 lateral spikelets awl-shaped, the inner glumes
broader & strongly ciliate, both glumes of middle
fertile spikelet still somewhat broader & strongly ciliate
abundant in awns. Lateral spikelets empty.

3-10-30 *Lamarchia aurea* Moench Knt 319, Bon
^{349 CP 121} 365 = *Cynosurus aureus* L Bar 505. Agrees with
desc. except that (at this stage of early fl) effect is
silvery green not gold.

3-10-30 *Cynoglossum creticum* Vill Knt 301 = *C. pictum* ^{Bar 322} Det
Dump east end of Calle de la Salud. Bud. Boraginaceae.
Stout, softly pubescent. Lvs large to 11 in, lance-
oblong. Lower ones petioled, upper ones sessile & partly
clasping entire. Corolla lobes with scale at base.
Racemes with bracts only at very base. Consider it

Cynoglossum pictum Ait. Ber 326 (See 3-17-30)

3-10-30

Vine on steps & Infanta. Fr. white, ^{fleshy} obovoid, $\frac{1}{2}$ in diam, 2 celled with about 2 wedge shaped, black reticulated seeds in each cell, attached axile. Ovary superior to short 5-toothed calyx which is articulated with pedicel. Infl a panicle the lower branches subtended by alt lvs on teriatised petioles. See 3-2-32. prob. *Cestrum nocturnum* L. B.M.J.C.P. 661

3-10-30 *Delinnea molle* L. B.M.J.C.P. 461, See ill R.H. N 38. Fr. Garden & Infanta. Fr on trees last week of Jan mostly fallen now. Mostly less than $\frac{1}{4}$ in diam. Outside covering thin & papery. Stone not smooth

3-10-30 *Tecomaria Capensis* Seem B.M.J.C.P. 687
Garden & Infanta. Kn I 61

Bougainvillea
3-10-30 *Bougainvillea spectabilis* Willd B.M.J.C.P. 255
Kn I 51 Garden & Infanta

3-11-30 *Plantago Lagopus* L. Kn # 409, Bar 380, Bon 260 Fl. on wall east of Cross at Son Rapina. Ident. acc to Bar! (Note that acc. to Bon, since lvs are $\frac{3}{4}$ -1 in wide narrowing to petiole not more than $\frac{3}{16}$ this could not be *P. agropus* but must be *P. albicans* L.) Lvs 5-nerved, planely pubescent, very minutely doubly toothed. Peduncles appressed pubescent, ridged & often twisted toward apex. Bracts pale, with one evident pale green nerve, dark tip, long ciliate. Calyx lobes conspicuously alb. ciliate. Corolla yellowish with tips dark. Ovary seems to be 2-celled with 1 ovule in each cell. (See 3-26-30)

3-11-30 *Rubia perigrina* L. Kn # 428 Bar 219 Bon 138 Bon 219 ill. Fl. young fr. wall bet Establishments & Son Rapina. Lvs at fr. very dark green. Young fr. reddish brown. Lvs to 43 mm long, 4 mm wide narrowed to point, linear-lanceolate hence forma ~~longifolia~~ *angustifolia* (Bar.) or perhaps (Kn) or perhaps forma *longifolia* (Kn) (See 3-19-30; 4-18-30)

3-4-30 *Galium saccharatum* L. (See 3-4-30) Near Establishments.

3-11-30

Radish? of some sort. Part of root found in ditch
(evidently thrown away) with at 18 in high with
of bright pink fls. Root 2+ in diam & part at least
12 in long. St almost if not quite smooth. Lvs somewhat
rough hairy.

3-11-30 *Lavatera cretica* L. (See 3-4-30) Fl. Bet. F. stat.
& Son Rapina.

3-11-30 *Mercurialis rotundifolia* L. Knth 128, Bar
82, Bon 57, BVH ⁹⁶ Mill Fl. Bet. F. stat. & Son Rapina.
Fls small & lighter than *M. mollis* (as remembered)
Carpels hairy, petals entire (See 3-11-30)

3-11-30 *Muscari comosum* Mill. Kn^I 378, Bar 440
Bon 305. Near F. establishments. Lvs to $\frac{1}{2}$ in broad while lvs
of *M. racemosum* Mill. coll. near by were less than
 $\frac{1}{8}$ in broad. Lvs not shorter than scape.

195

3-11-30 *Valerianella echinata* DC. Knth 435 Bar 239
Bon 145. Fl. Establishments in well short distance
on road from tram line. No question see ill Bon.

3-11-30 *Muscari racemosum* Mill (See 2-25-30)
Fl. near Establinments

3-11-30 *Ulex europaea* L. Bar. 308 Tree east of
San Rapiña. Crossed branches from base of trunk
with the light gray bark & small lvs. desc 2-14-30.
This growth seen frequently & prob comes from
old stumps or roots.

3-11-30 *Rumex pulcher* R. L. Kn I 431, Bar 400, Bon 272
B. H. 395 ill. Dried infl only, no lvs collected. Inner calyx
segments strongly toothed. Pwd not *R. obtusifolius* L
since that is not common & since whorls of fls
are very distinct & except uppermost lf. bracted. &
pedicels shorter than perianths.

3-11-30 *Ayuga Dva*, Schreb

Same as A 2-27-30 Establinments. (See 2-27-30)

3-11-30 † *Rhamnus alternata* L. Same plant as
2-27-30 which see. Fls of garden on west side of rd
from Establinments to Palua.

3-13-30 *Abutilon*

Fl. Garden of Infanta. See B.M. of C.P. 483 ⁴⁴⁸⁸ Can't tell
if fl. is composed of carpels that separate from axis

Each cell many ovuled. Stamen column
bears anther only at top. Involved none.
Corolla bell shaped (fl 3 in long) yellow veined red.
Lvs 3 lobed (or 5 with 2 short lobes at base), the middle
lobe much longer than the other & a little longer
than the undivided part of lf., acuminate not
narrowed at base. Lf cordate, smooth above &
~~almost so beneath~~, more or less stellate pubescent
beneath. Petioles slender. Calyx 1 in high, divided
below middle, stellate pubescent. Ovary stellate
pubescent. Stigmas capitate.

3-13-30 Citrus Limonia Oakeck B M J C. P. 4462
C. Limonium, Risco Bar 89. Garden & Infanta
Petiole not at all winged or margined $\frac{1}{2}$ in long

3-13-30 ?? Acacia neriifolia Cunn B M J C. P. 439
Garden & Infanta. Heads globose. In not this than
not in B M J C. P. Phyllodes 5 in $\times$ $\frac{1}{4}$ in acute or
acuminate. At each point where 4 fls touch the
receptacle of head bears a filiform organ with
pinkish disk at apex. This disk shows plainly
in bud but is covered by stamens in fl. ∇
Very fragrant. There may be subtending bracts

8-13-30 *Acacia longifolia* Willd (See 8-10-30) Garden
& Infanta. Each fl. subtended by bract similar
to the expanded top of bract(?) of above, not quite so
disk-like. Not fragrant

3-13-30 *Dombeya*

See B.M. & C.P. 498 like *D. Wallichii* Benth & Hook except
that fls are very delicate pink. Garden & Infanta
Tree 10-12 ft. ~vs orbicular cordate $8\frac{1}{2}$ in diam, acute
Pubescent above with simple hairs, stellate hairs
on veins, beneath more softly pubescent with stellate
hairs. Petiole $5\frac{1}{2}$ in. Stipules ovate, acuminate to
 $\frac{1}{8}$ in. pubescent. Peduncle 5 in. with 1 or 2 bracts
(like stipules) near top. Fls in dense head with
invol of 11 ovate bracts 1 in long. Each fl with 3 lance-
olate ^{deciduous} bracts $\frac{1}{2}$ in long on one side just under calyx
Bracts not connected. Gardener called this (if correctly
remembered) *D. amabilis*. Prob the same as
seen in Bermuda at La Barga & elsewhere.
Lvs pubescent.

3-13-30? *Chrysanthemum anethifolium*. Bours.
B.M. & C.P. 760 Garden & Infanta. Lvs grayish green
so considered this instead of other possibility
C. frutescens L.

3-14-30 *Chlora perfoliata* L. Kn II 288 Bar 314
Bon 314 ~~B.H.~~ = *Blackstonia* — Nuda B & H 314
Bellver, ^{path east from gate} 1 spec only found & that somewhat eaten
by worm. Lvs not at all narrowed at base. (See 4-10-30)

? See A & B 3-30-30

3-14-30 *Valerianella crisocarpa* Desv var *truncata*
Loe & Bar Kn II 433 = *V. truncata* Betcher Bon 146
? prob = *V. truncata* DC. Bar 230. Fl & young
fr. Bellver path east from gate. Calyx & fr
exactly like ill Bon. Plants $1\frac{1}{4}$ -4 in. Hard to
identify from Bar. Lint of calyx so minute
can not tell if "reticulato-venoso" no veins
showing 20x. St simple from base, dividing
into 2 parts only near top. St. very lightly
hispid on angles but the entire lvs not hispid
on edges or mid ribs. Bracts broadened at base
("alabardadas"?) and very slightly ciliate. Can
not see if the concavity at top of fr is surrounded
by 2 filiform ribs. Fruit pubescent. Calyx lint
entire with one point as in ill Bon. (See 3-26-30
[Perhaps *V. microcarpa* Loe see 3-18-32]

3-14-30 ?? *Filago germanica* L var *spatula* DC
prob = *F. spatulata* Presl Bar 259 and *Knaphalium*
spatulatatum N. Bon 173 (See also *F. germanica* L
B & H 238.) Bellver, path east from gate. Plant only

3-14-30

only 2 in high in very early bud. But the white cottony lvs narrowed to sessile base, the similar (tho hardly narrowed) lvs immediately under fl heads, the cottony bracts with very acuminate smooth yellowish points all strongly suggest this identification (See 4-4-30)

3-14-30 *Phyllirea angustifolia* L. (See 3-14-30) F. L. Bellver.
lvs (on the tips collected) $\frac{3}{4}$ in or less long.

3-14-30 *Lotus edulis* L. (See 3-4-30) Bellver. It only 6 in high. wings open to horizontal position leaving keel exposed beneath. Fls 11-13 mm long. Very young fr shows crease on back but is not curved. Calyx not always & purple veined as 3-4-30.

3-14-30 *Euphorbia peploides* L. Kn II 157 = *E. ^{peploides} ~~peploides~~ ^{abundans}* Bon 382 Bon 407 ~~alt.~~ Bellver. Fls fr. Plants to $2\frac{1}{2}$ in. Ident. esp by the slightly ruffled wings on fr. seeds have 2 longitudinal rows of 3 pits on back, 1 row of 2 pits on each side & 1 elongated pit on each side of front. Upper end has small white conical appendage stands greenish or brownish with lighter colored (sometimes almost white) slender tips (See 3-14-30 See 1-18-31)

3-14-30 *Konigia maritima* B. & Kun II 34 = *Alyssum*
maritimum Lam. Bar 37, Bon 29, ~~Bon 4~~ = Q. — Linn.
BoH 42 = *Lobularia maritima* Desv. B.M. J.C.P. 311.
Bellver. Common in many parts of island.

3-14-30 *Onagallis arvensis* L. (See 2-4-30) Bellver.
Fl. blue (No red ones yet seen in Majorca) Lvs very
conspicuously dark spotted beneath (See 3-30-30 fl. red)

3-14-30¹ *Vaillantia muralis* L. (See 2-14-30)
Bellver. St somewhat hispid, lvs obtuse, fr smooth
except for spiny projections. Crown high (as remem-
bered in 2-14-30)

3-14-30 *Serapias lingua* L. (See 2-20-30) Bellver.
Path eastward from gate. Tongue varies in color from
creamy pink to deep rose-mauve (See 3-27-30)

3-14-30 *Sisymbrium Iris* L. (See 2-24-30) Road
side Terreno. and cfd with this

3-14-30
Sisymbrium irio L. Desf. Kun II 31 Bar 34
Bellver path east from gate. Fl & fr. Lvs not

3-14-30

not grayish ^{smooth} above. illvs petioled, pinnately div.
into 5 seg, coarsely irreg. toothed, the terminal
seg larger and without downward pointing lobes,
the lateral seg. hardly narrowed at base. Fls. yel-
low, very small. Fr st. greatly elongated, pedicel
at st. to st. Seeds 1-rowed, cotyledons flat, ~~incumbent~~
Pedicel short, pubescent on upper side. St. looks smooth
but has a few soft hairs & young parts sometimes
pubescent.

3-14-30 *Serjella aetnensis* L. (See 2-24-30) Bellver
St. to 18 in sparsely hispid, esp above, leafless except
for bract-leaf at lower forkings.

3-14-30 ? *Crepis taraxacifolia* Thell (See 2-25-30)
Bellver. Fl. Plant thought to be same as 2-25-30 be-
cause of loose outer scales of invol. N.B. the branching
st. naked except for bracts at forks. Basal lvs
broaden from narrow petiolar base with a few
low teeth & have no marked runcinate lobes till
about the middle. Receptacle ~~abundant~~ alveolate with
short fringe of hairs around each depression.

3-14-30 *Europernum piceoides* F.W. Schmidt ^{Ku II 574}
= K. — DC. Bot 281 = K. — Desf Bon 185. Early fl.
Bellver. ~~But~~ this spc. instead of *E. Dalechampi*
because the 1 in of root collected is not black
and because invol has stiff white hairs
or is not at all tomentose. But note that
invol bracts are black margined & termin-
al lobe of lf large. Some of lvs have lower lobes so
indefinite as to be almost spatulate. Lvs soft, light
green, pubescent beneath. Edges with irreg, divergent,
low but very sharp pointed teeth. Fls light yellow
Receptacle with depressions & short hairs between.
Achenes 3-winged at base, the beaks of the exterior ones
curved inward. The upper lvs cordate clasping
tapering into long narrow dentate lobes.
(See *E. Dalechampi* F.W. Schmidt 3-20-30)

3-14-30 *Hyperic radiata* L. (See 2-25-30) Bellver

3-14-30 *Hyperic scabra* L. (See 3-4-30) Bellver. Cf
with above.

3-14-30 *Sonchus tenerrimus* L. (See 3-24-30) Bellver
from wall running east of gate

3-14-30 *Portulaca Lenticula* L. (See 3-4-30) often bud. Bellver.
Stamens usually 6, sometimes 7, filaments short, anthers
large. Calyx lobes as many as to be hardly countable.

3-14-30 *Sonchus*

Bellver. 10 in high, glabrous, except for a little
tomentum at base of young fl heads. which in
bud & young fr look quite blue *S. tenerimanus*.
Lvs. (no basal ones remaining) consist of single
blade widest at base with lobes pointing down-
ward & slightly outward (constricted little
if any above base) on a long winged petiole
which more or less clasps it with pointed lobes.
Blade & wings very laciniate. Upper lvs have
progressively wider wings & more clasping
base, the uppermost being sessile, clasping
with pointed lobes. Fl. heads 4. Seeds brown
ribbed & the ribs cut finely transversely.
Prob. a form of *S. oleraceus* L.

3-14-30[†] *Allium Chamaemoly* L. Ku I 369, Bar 438
Bon 398. Fr. Bellver. Only 1 clump found on path east
from gate. Bulb sample oval $\frac{3}{8}$ in $\times$ $\frac{1}{2}$ in diam. Center
of bulb solid enclosed in firm white tunic & parts
of brown coverings - prob the white layer of previous
year. No odor. Lvs. linear 4-6 in $\times$ 3/8 in, soft, long-
ciliate on edges. Scape $\frac{3}{4}$ in. Umbel 5-15 fls.
Capsules nodding, 3 black seeds in each calyx

3-14-30¹ *Lonicera implexa* Ait. Kn II 431, Bar 217
Bon 137 No fl or fr. Bellver. Desc of lvs. leaves little doubt.

3-14-30? *Clematis Flammula* L Kn I 481 Bar 7
Bon 4. See also BM J.C.P. ~~and Bon~~ Bellver
No fl or fr. See Kn II Pl XXXVII for lvs of *C. cirrhosa* L
only other *C.* in Majorca. Young shoot 18 in high (above
ground) St ridged, lightly & softly pubescent esp at top
Lvs all somewhat pubescent, the very young ones
markedly so. (But see ¹⁰ 26-30 lvs of *C. cirrhosa* as
much divided as all X Kn II Pl XXXVII)

3-14-30 ?? *Elycia*

Grass by side of road Calle Bellos. 8 in high Infl.
panicle with general look of Poa. Each spikelet on
short pedicel ($\frac{1}{2}$ to 1 mm) which enlarges at top. Spikelet
often 4 fld (perhaps when less it is because upper
flds have fallen) with rachis extending slightly.
Glumes herbaceous slightly white margined
Lower glume $1\frac{1}{2}$ mm long narrow, 1 nerved, acute;
upper glume 3 mm long, part 2x as broad & seeming
to broaden toward tip, 3 nerved & obtuse but not
rounded. Both glumes smooth. Floret about 3 mm
long, somewhat flattened laterally but lemma
hardly beaked. Lemma narrowly ~~ovate~~
hyaline on edge & deeply so at apex (about $\frac{1}{4}$ total
length).

3-14-30

length) Apex rounded with minute cleft. The 5 nerves, all definitely woolly do not extend into hyaline portion. Palea 3 nerved, the nerves as woolly as those of lemma, only minutely if at all bidentate. Seed plump with no sign of furrow and has an fairly advanced stage a definite white cartilaginous appendage (remains of style) at its tip. Lvs $3\frac{1}{2}$ in long by 3+ mm wide smooth, Ligule hyaline 3-4 mm long. Sheath closed part of length, sometimes almost to ligule. Culms somewhat compressed. Nearest guess is *Glyceria* of a sp. not in any of my books.

3-14-30 *Eureous* Dlex L. (See 3-25-30) Bellver Early or bud & cups of old fr. cfl. with *C. cocefera* L of 2-27-30.

3-14-30 *Calamintha Nepeta* Sari forma *menthaefolia* Nutt 343 part = *C. menthaefolia* Host Bar 363 the desc of which this closely resembles. No fls. plant with remains of last yrs. infl. Bellver s-e corner. St. & lvs pubescent with spreading hairs - vs gray green - var. as growing around edge, showing plainly beneath. Lvs $\frac{3}{4}$ in diam. Fl. Infl.  compound consisting of a pedicel umbel of 3 fls in axils of upper pair lvs (lvs now fallen) and shaped ciliate bracts

at 2. The umbels on opp. sides of stem turned
so as to make inf. one sided. Calyx 6 mm
overall, the 3 upper teeth, erect, short tri-
angular & hardly ciliate, the 2 lower ones
very long 3 mm. awl-shaped curved upward
& markedly pectinate. Tube somewhat swollen
near base. Throat with definite ring of hairs
Note: does not agree with desc of *C. Nepeta* B & H 363
Bon. 249. nor yet with *C. Acinosa*. I don't see ~~cruciate~~
lvs. strong but hardly fetid,

3-14-30 † *Rhamnus* ^{*alaternus*} ~~*alternata*~~ L. (See 2-27-30 & 3-11-
30) Same shrub of fls Bellver extreme S-E corner.

3-14-30 *Arisarum* ^{Targ Tozz} ~~*vulgare*~~ (See 2-4-30) *uniflorum*
fr. Bellver. Berries (still green) large, $\frac{1}{4}$ inch diam almost
sq. on top with fluted crown around edge. Seeds about 7,
longitudinally ribbed. [Note 12-31-30 Costa III #34 "fruits vertes"
so from these fr. were ripe.]

3-14-30 *Erica multiflora* L. (See 2-4-30) Bellver
at young growth bright red.

3-14-30 *Lavandula dentata* L. (See 2-4-30). Stamens

3-14-30

Stamens "dobrados sobre el labio inferior" Bas 353 "appuyées sur la lèvre inférieure" means that anthers rest against anterior part of tube instead of being in posterior position as usual in this family. Anthers woolly. Corolla pubescent inside & outside. Stamens included. The upper (closed) bracts subtend completely formed fls.

3-14-30 *Vinca media* Hfgg lvs. (See 3-4-30) Bellver extreme S.-E. cor.

3-16-30 *Arenaria serpyllifolia* L. Kn I 451 Bar 68 Bon. 50 B & H. 71 ill. Sides of rd Terreno. Calles de Mayo. (See 3-26-30)

3-17-30 *Polygala myrtifolia* var *grandiflora* Hook & Arn. Bot. Beechey 451 Fl. from table bouquet Hotel Cañal. Fls from bright rosy purple. The 3 small sepals purplish green with green nerves & mid nerve a low keel projecting beyond the ciliate tips. The 2 upper petals very hairy on upper edges the limb of each consisting of oblique & erect lobe (there over lap) & a long slender forward curving lobe. Stamen tube similarly hairy on edges as are also edges of lower part of keel. Ovary slender obovate, flat smooth, winged at edge. Ovules 1 in each cell

smooth, pub. unbaril. Young ab. only slightly pub-
escent the $\frac{1}{2}$ in pedicels more so. Lvs. obanceolate
to 2 in x $\frac{3}{8}$ in. or (long) sessile. all alt on these
spec. but not entirely flat.

3-17-30 *Salvia*

Fl. Garden Linn. Shrub overhanging wall on
no side of train line shortly east of terminus.
Very like desc. *S. Greggii* Gray B.M. & C.P. 640 except
as to lvs. which are ^{very short petioled} ovate to 5 in. rounded or ^{almost} truncate
at base, rounded at apex, smooth, definitely crenate
except at very base, dull green above & slightly glaucous
beneath, pinnate nerves show plainly on ^{some of the} sides. ^{some of the} purple
Shrub to 3 ft with slender twiggy branches. Trigs
obtusely puberulent with short tuft of hairs at
nodes bet bases of petioles, this tuft sometimes pro-
longed in hairy line down stem. Fls in short
terminal ^{few ped} racemes, bracts falling as fls open.
Calyx $\frac{3}{8}$ in, upper lip narrowly ovate, acute, entire
7 nerved, the lower lip a trifle shorter, 2 toothed (the
teeth rounded a little on outside, 8 nerved (2
nerves ending in sinus bet. teeth, 1 nerve
ending in each tooth & 2 nerves on outside of
each tooth. Corolla almost 1 in long, rich cherry
red. Tube swollen on under side at top, upper
lip erect (only slightly curved on back), under lip

a few obscure hairs on back of upper lip at tip

3-17-30

lip large (almost $\frac{1}{2}$ in long $\times$ $\frac{1}{2}$ in wide) showy. Corolla glabrous^x inside & out. Stamens with anterior portion of connectives adherent their full length deflexed into swollen part of tube. Corolla tube bears posteriorly and below plane at which filaments are affixed 2 short white ^{pendent} projections which might be staminodes. Outside the base of the swollen portion ends in 2 concavities or pockets, looking from inside these pockets are found to be terminated by flat appendage $\frac{1}{4}$ in long. Style flattened with line of hairs on back, conspicuous (20x). Ovules smooth at this stage, the part of disk which projects below them longer than ovules. Pedicels about $\frac{1}{8}$ in long app.

3-17-30 *Fagonia cretica* L. (See 2-4-30)

3-17-30 *Cynoglossum pictum* creticum Vill. Kn # 301
= *C. pictum* Ait Bot 366, Bon 225 (See 3-10-30) Fl. west of
Kinross cemetery. & seen elsewhere. Fr too young to show
char. 10 minute dark spots at base of disk.

3-17-30 *Galium saccharatum* L. (See 3-4-30 & 3-11-30)
Fl. west of Kinross cemetery. Note the 2 broad low of fls

and much larger than others ($\frac{3}{4}$ in $\times$ $\frac{3}{16}$ in), obtuse at apex with very small cleft. Fls sometimes with all 3 σ or with 4 σ or 4 with 1 ϕ and 3 σ .

3-17-30 *Linaria triphylla* Mill Kn # 378 Bas 341
Bon 293. Fl. Field west of Kenosha Cemetery. Upper lip
cleft half its length; lower lip hairy inside with stamens
& style pressed close against it. (A) Fl purple, palates yellow.
(B) corolla pale purplish with upper lip still lighter,
almost white. Lvs faintly 3-5 nerved. (See 4-25-30

3-17-30 *Papaver Rhoeas* L Kn # 5 Bas 19 Bon 12, BV # 19
Fl. Field west of Kenosha Cemetery. ^(A) Petals blood red with
black spot at base, the black spot with white border
(much wider inside than outside) at top. Peduncles
very rough hairy. Stigmas 13, lobes distinctly
overlapping. Filaments very dark purple, anthers
oliv-drab. Spec. picked with only lvs at base of
peduncles, these are 3-divided to base in long
linear ^{toothed} segments some of which are again 3-div
ided. Lvs very rounded at top

B. Same field Prob the same since capsule very
smooth & not elongated as in *P. dubium* L. But
fl the pale brick-fire red associated with *P. dubium*
Stigmas 7, lobes less overlapped than A.
Upper lvs much as in A. Lvs rather

[Note 3-12-32 Could *P. debium* L. and those taken
for *P. debium* previously be *P. pennatifidum* See 1-13-32
3-17-30 2-11-32

rather more pointed at top than A

3-17-30 *Papaver hybridum* L (See 2-25-30) Same
field as above. Buds

3-17-30 *Lotus ornithopodioides* L. Kn #98, Bar 132 Bon
81 Fl v. unripe fr. Field west of Kenora cemetery. Fls
usually 4 in group. (See 3-30-30)

3-17-30 *Vicia sativa* L Kn II 114, Bar 137, Bon 86 B.H.
128, B.M.D.C.P. 392. Fl. Field west of Kenora cemetery. Lfts
o. fr. $\frac{1}{2}$ - $\frac{3}{4}$ in long, rather squarish truncate at end
with definite tooth in center. Fls solitary $\frac{3}{4}$ in long.
Ovary pubescent. Fl. very short peduncled.

3-17-30 *Lathyrus* ~~Cicera~~ *Cicera* L (See 3-4-30) Fls young
fr. west of Kenora cemetery. Young fr (1 $\frac{1}{8}$ in) show growth
on back. Peduncles about 1 in long with pair of
very small bracts shortly above middle.

3-17-30 *Raphistrum rugosum* Bely Kn II 27 = R,
— All Bar #3, Bon 34. Fl v. young fr. west of Kenora

Cemetery. Notable to distinguish bet the 2 varieties given in Knoche. Fl yellow not "pale" Fl. too young to show char. of cotyledons.

3-17-30 ?? *Carduus tenuiflorus* Curt (See 2-13-30)
Fl & fr. Rd west of Kinross cemetery. But the same as 2-13-30. Same objections in that: anthers seem prolonged & clavate at base & no little glands of brilliant yellow. Also bracts not quite as long as fl (as perhaps *C. pygmaecephalus* L. but achieves this smooth & shining not viscid.) Heads easily detached. (See 11-22-30)

3-17-30 *Cuscuta epithymum* Murr Kn # 298
Bar 318, Bon 218, B & H 318 ^{mill} ill. Fl. growing on *Helianthemum Fumana* at top of hill above Cas Catala in path. Stem very slender, red. Fl. mostly white, some tinged reddish. (= *Fumana Spachii* Gr & Gd.)

3-17-30 *Helianthemum glutinosum* Pers.
(See "pross Cistaceae" 2-14-30) (Old pods with 1 seed on "rough road" from Kinross cemetery to Cas Catala. See 4-10-30)
(Ident. later by desc Costa I 151)

3-17-30 *Cneorum tricoccum* L. (See 2-14-30) Fl.
"rough road" from Kinross cemetery to Cas Catala.

3-17-30 *Valerianella coronata* DC. subsp. *discoidea* ^{L. var.}
Rough form *multidentata* Nutt # 434 = *V. discoidea*.
Bar 231 Fl. edge of field west of Kinross cemetery no. side
fld. $1\frac{1}{2}$ in tall. over 10 narrowly oblong entire or
with few low teeth; ^{middle} upper ones (where st. divides in
2) 3-lobed to below middle the lateral lobes much
shorter, upper ones (just under fl heads where
st. branches again) linear entire. Fls in dense
bracted heads, the calyx lobes standing far from
corolla with narrow hooked tips. The under part
of calyx lobes ciliate, pubescent inside. Top of ovary
wooly pubescent. Calyx also long hairy at base outside
but most of outside of lobes smooth (See 3-30-30)

#196 R.B.A.

3-17-30 *Salinum*

Flv almost ripe fr. West of Kinross cemetery. St about
3 mm wide, very sharply 4-angled with ^{weak} recurved
prickles on angles. Lvs dull dark green, in lvs,
oblanccolate $\frac{3}{4}$ -1 in $\times$ $\frac{3}{16}$ - $\frac{1}{4}$ in, 1-nerved, very rough
with stiff white hairs above, smooth beneath
except for recurved prickles on midrib & edges
apex with long sharp mucron. Fl. white $2\frac{1}{2}$ mm

across diag. single on very short peduncles which terminate short axillary branches. Sometimes 2 peduncles arising from same point. Fr. with peduncles elongated to $\frac{3}{4}$ in. Fr. tuberculate with tubercle ending in hooked prickles. Fr. (not yet ripe) 6mm across both parts. Seems not in Barcelo 'Why not?'.
Apr. arrival? See 4-14-30

3-17-30 Polycarpon tetraphyllum L. f. Kn I 458
= P. - L.
Bar 178, Bon 108 B & H 79. Fl. Road west of Génova cemetery. (See 12-10-30)

3-17-30?? Herniaria hirsuta L. Kn I 462, Bar 180.
Bon 109 (See B & H 382 for desc. of genus) Fl. West of Génova cemetery. Flat on ground. Pubescent, hairs not appressed. Lvs oblong $\frac{5}{9}$ mm long x ~~less~~ than $2\frac{1}{3}$ mm wide, pubescent, tapered to both ends, sessile, stipulate. Lvs seem to be alt. with a branch bearing floopp each lf. Calyx usually 4-5 parted, (seems usually 4), pubescent, lobe ends no hairs no longer than the others. No signs of pedicels. Siliques seem always 2, ^{in 2 or 3 parts} I seem to discern disk bearing staminate (See B & H) Stigmas 2.
[Note 3-5-32 when studying specimen of H. 3-5-32 why not H. cinerea DC. See all Contents 103]

3-19-30 *Paronychia argentea* Lamk (See 3-4-30) Fl.
west of Kinross cemetery. Cf. with above.

3-17-30^{??} *Arenaria procumbens* Vahl Kut #53 =
~~Bar~~ Alsine — Fgl. Bar 68. Prob bet Kinross &
Cas Catala "rough road".

Branched from base into many lax st. 18 in high.
are so weak they may have been prostrate. Some
st. almost simple, others much branched, gray-
ish-yellowish green but only slightly pubescent.
Lvs opp. no stipules, same color as st., linear or
narrowly oblanceolate, those in middle of st.
15-18 mm x 3-4 mm; those toward base & top smaller
& linear. Lvs sparsely pubescent (like st. above) & a
few hairs on the entire edge might pass. be
called cilia. Lvs with 1 indistinct nerve & with
fascicles of lvs in axils so as to have somewhat look
of *Spergula*. Infl cymose (dichotomous). Peduncles
2 cm. Calyx 4-5 mm, pubescent, hardly glandular.
Sepals 5, erect, blunt, the inner edges broadly white
hyaline, no distinct nerves. Petals 5, pinkish,
~~not notched~~
~~entire~~, shorter than sepals & hidden by them. Apex
acute & margin near apex almost ^{very} denticulate.
Stamens 10, Style branches 3, very glabrous, ovoid,
somewhat roundly 3 angled, on short stalk.
1-celled. Ovules many on free central placenta

In Barcelo' this is only poss. iden tho it is ~~not~~
(1) ^{not} "glanduloso-viscosa", (2) lvs usually only $7\frac{1}{2}$ length
of internodes, (3) 70 sepals found "extendidos".
But not in Bonnier or B & H. Note that branches
of inflo are subtended by 2 lvs so that effect is
much more like than ill of *Spergula arvensis*
Bon #172. St has base of each internode
enlarged! See 4-18-30

3-17-30 *Melilotus sulcata* Desf Kunt 77 Bar 120 Bon 76
Fl & young fr. Field west of Genoa cemetery.
Fr definitely concentric ridged & like ill Bon.
But racemes not as long as lvs. Peduncle aristate
only because upper buds have fallen unopened.
Stipules broader at base than "alemnadas" would
suggest. Lft to $1\frac{1}{2}$ in. See 3-29-30

3-17-30 *Stipa capillata* L var *junceae* Kunt 392 =
S. juncea L. Bar 494, Bon 356 West of Genoa lower
road. Ligule 10-15 mm. Lemna almost equal to mm
long thin & papery narrowed into long acuminate
points 1st 1-nerved, 2nd 3-nerved. Lemma coriaceous.
brownish. Stipe of fl silky pubescent (stalk above
glumes) and base of lemma has same silky
hairs in line on back & more or less laterally

3-17-30

laterally. - lemma terminates in awn, pubescent at base & denticulate to tip 10 cm. or more. Palea coriaceous like lemma (not concealed by it - see BMJ.C.P. 113) its nerves not evident but (20x) when viewed from inside seems to have thickened band down back. Stamens 3. Stigmas plumose (naked at base) at top of narrow, obovate (oblanccolate) ovary. - vs convolute setaceous. Awns not as definitely geniculate & sinuated as desc. form because only in fl. (See 4-15-30)

3-17-30 *Andropogon hirtum* L (see 3-27-30) lower id Kinross. Awn 25-30 mm (♀ being 5 mm or less) Note char. not noticed 3-27-30. the branches (which bear spikelets) are always in 2's at end of long delicate if ensheathed peduncle.

3-17-30 *Sagina apetala* L Kunt 449, Bae 67, Bon 48 Fl & fr. in garden of Hotel Cäs Catala'. 1-2 cm high. Calyx 4 sepals (1 can 5) valves 4. Seeds brown, minutely roughened. Owl shaped lvs setaceous at end. Sepals slightly hooded apex, & narrowly white margined. Peduncles not "glandularous" Sepals erect when fruit opens. No signs of petals. See 3-30-30

3-17-30 *Rhagadiolus stellatus* D.C. (See 3-10-30
west of Génova cemetery. Fl & fr. well developed
plant 8-10 in high diffuse. Ex. achenes each
wrapped in ^{invol} bract form 8 rayed star to $1\frac{1}{2}$ in across
St. lvs, subtending branches linear

3-17-30 *Reseda lutea* L. (See 3-4-30) Fl & young fr.
Génova on wall near corner where Ramirama
into the town.

3-17-30 *Marrubium vulgare* L. Ku II 331, Bas 369,
Bon 255, B. & H 367, B. M. G. C. P. 648. Near Génova, common
around dumps of Palma. First fl. of season.

3-17-30 *Hedyscopia polymorpha* D.C. (See 2-27-30)
Near Génova. St. somewhat ^{young} hirsute, bracts more
so. Pl. 18 in high. Peduncle sensibly enlarged at top.

3-17-30 *Pittosporum Tobia* Ait. B. M. G. C. P. 337 Fl. Hotel
Los Cabala. Petals $\frac{3}{8}$ in long. The same in bud in
garden of Duponta. The fr. of this later only just
fallen opened in 3 valves with sticky seeds
on parietal placenta looking much like *P.*
undulatum in Bern *unda*.

3-18-30 *Sparaxis tricolor*, Ker. BMJ C.P. 196. Fl. Cult. forget. As remembered in Bermuda. Petals red, dark at base, tube yellow. Stamens do not seem at one side declining & arching. Anthers face outward. Style folded down, stigma on edges & top.

3-18-30 *Hypericum balearicum* L. Kn II 184 Bar 86 Collected by Mr. Heron, hills above Kenora. Sepals compressed laterally as to appear beaked; green on keel, white on margins, which is prolonged into point at apex. Petals not notched. (See 3-26 v 4-14-30.)

3-19-30 *Geranium Robertianum* L. Kn II 129 Bar 82 Bon 57, Bon 95, Fl. Abbr. Fornalutx (Mr. Heron bro't spec. from Kenora 3-18-30)

3-19-30 *Orechia morio* L. var. *longicaerulea* Kn I 400 = *O. longicaerulea* Poiz Bar 457 (Note Kn v Bar both seem to consider *O. morio* L. not in Balears see desc. of Bon 311 v Bon 450 ill. which is not like spec.) See 3-20-30. Fl. Abbr. Fornalutx near point where we turned back. (Mr. Heron bro't spec. from Bellver 3-18-30) Note. Knoche does not give distribution outside of Balears. Like 3-20-30 except fewer flds & in color of fl. Wood, spur & bracts are purple, lateral lobes of lip very dark purple, middle lobe a lighter purple (somewhat darker than sepals) - this differs from desc. Bar which says "casi laevis" - with several dark purple spots. All bracts 8-veined faintly. Spica 5 mm wide at tip.

3-19-30 *Allium triquetrum* L. Kn I 371 Bar 489
Bon 299, BVH. ill. Above Farnalutx along water course.
Very abundant. Perianth seg. white with line of green
down middle. Stamens attached a little above base.
Seeds 2 in each cell.

3-19-30 *Asplenium Trichomanes* L. Kn I 259
Bar 532, Bon 379, BVH 586 ill. Spores. Walls above
Farnalutx.

3-19-30 *Polypodium vulgare* L. Kn I 264, Bar 531
Bon 378, BVH. 579. Spores. Walls above Farnalutx.

(a) pinnules not widened at base (or very slightly)
or set close together (b) pinnules widened on
both sides at base forming broad rounded sinus,
seg. perhaps little more acute than (a) In both
cases forming pinnules have low teeth.

3-19-30 ^{*altissimus*} ~~||~~ *Rhamnus* ~~altissimus~~ L. (See 2-27, 3-11/14-30)
Fl. which as in other cases seem to grow under
Myrtus communis.

3-19-30 *Vicia media* ^{Link v Hoff.} (See 3-4-30) Common
along water course from Farnalutx
to Goller

x Perhaps should be called raceme, not counting the pedicels of individual fls along the spathe. N.B. the loose, disjunct infl is due to these pedicels & to fact that the branches are longer than the spathe.

3-19-30 Iris

Fl. In pot at Hotel Ferro-Caril but said by proprietor to be wild & much larger in fields. Mrs

Richardson met on train also said it grew wild. Lvs not collected but general feet of iris.

Infl. a long curving (not stiff & upright) ^{flat} panicle.

Each branch subtended by green spathe like bract $\frac{1}{2}$ - $\frac{3}{4}$ in long with acuminate curved tips.

Branches (upper part of infl. only collected) $\frac{1}{2}$ in long beams at tips at least 2 (prob 3 or perhaps more) pedicelled ~~the~~ spathe bracted fls. Inner spathe valve $\frac{3}{8}$ in, green acute, inner one $\frac{1}{2}$ in green less acute & each of the 2 nd & 3rd fls (now buds) seem to have more spathe valve. 1st fl to open has pedicle $\frac{1}{2}$ + in flat on top, rounded beneath. Tube $\frac{5}{8}$ in of which lower $\frac{3}{16}$ is ovary. Fl $\frac{1}{4}$ - 2 in across pale lavenderish blue all 6 seg. spreading.

Outer seg. obovate $\frac{1}{2}$ + in across at widest part, dentate above middle, with a definite yellow fringed blade like crest in middle (longitudinal & extending in ridge to base, but 2 less definite lateral ridges. seg. marked yellow around crest & with dot & dark markings of darker blue & brown around this center. base to base. Inner seg. oblong toothed & ruffled, widely notched at apex. Claw not definite & narrow as in garden Iris (below) style branches as in iris (more upright than

in below). the upper lip deeply 2-parted & fringed, the lower lip slanted (ending at beginning of fringed part of upper lip) a little wavy at apex. Stamens as in iris, all white even to pollen reaching just to tip of upper lip.

Evidently not in Knoch, Benth's & Bonnier
See B.M.J.C.P. 191 Evansia section esp. *E. japonica*.
Thumb, which is exact desc. of spec. Could this have been recently introduced? Fls slightly fragrant.

3-19-30 Iris

Collected from garden of Infanta to cf. with above. agrees with *I. aculea* Todar. Bas 446, in that lvs are 3-4 ~~cent~~ cm. broad, glaucous at least at base, spathe swollen, its valves almost equal & scarious for not more than $\frac{1}{3}$ length.

= *I. pallida* Lam var *aculea* Richt. But note that acc to Bonnier 304 & B.M.J.C.P. 192 *I. pallida* has ~~but~~ spathe valves entirely scarious. Our spec. has fl almost white (faintly bluish) falls bearded yellow. The 2 terminal fls are sessile in spathe. It bears 1 lateral branch $\frac{3}{4}$ in, shorter than ^{the} spathe with 1 sessile fl.
See *Ingermanca* L B.M.J.C.P. 192. Subsp. this a hybrid.

3-19-36 *Viola odorata* L. var. *alba* Knoch Kn # 306
(Kn. considers there is only 1 spec. of the acaulescent *Viola*
in Balearics & did not try to identify acc. to Barcelo's)
Fl. above Fornalutx. Lvs dark green, pubescent both
sides. ~~St~~ Root stock upright $\frac{3}{4}$ in from rootless
at bottom to top of ground & ~~the~~ present lvs,
bearing underground runners below middle.
Stipules lanceolate with elongated tip, pectinate
with widely separated ~~at ant. ap~~ shaped teeth
below tip. Sepals oblong, 3-nerved, obtuse, narrow-
ly scarious on margin, the posterior one rounded
at base, the 2 anterior ones truncate & the 2 inter-
mediate ones narrowed into a sort of blunt ap-
pendage; all ciliate. Upper petals lying back
against peduncle, the lower one rounded or
very slightly notched, lateral ones lightly beard-
ed. All petals violet of same shade as cult.
ones in garden & Infanta with white at center,
the lower one with few dark veins in the white.
Ovary pubescent. Stigma as in ill. H.R. p 36 Bon
Bracts on peduncle sometimes above, sometimes
below middle. Lvs longer than broad (at least base)
& not at all shiny. Fragrant. Spur rather longer
& narrower than in cult. violet

3-19-30 *Cyclamen balearicum* Willd. Kn # 363
Bon 303. Fl. (just 1st season) above Farnalutx. Knoche
considers this diff from *C. europaeum* L & *C. repandum*
(see Bon 309) but not evident in what respect.
Teeth of lvs. very obscure. (See 3-26-30)

3-19-30 *Saxifraga tridactylites* L. Bon 186, Bon 115
B & H 195 (ill) see Kn # 46 *S. tridactylites* L. from
tenerrima Burn v B. (which Kn seems to consider
only one in island. Plants 1-2 in high all having
same fl. but diff in lvs. ~~The larger ones~~ (a) Lvs 3 lobed
to summit. (b) lower lvs 3-lobed, upper ones simple
(c) all lvs simple the upper ones fleshy. Styles widely
divergent when petals fall. On walls above Farnalutx

3-19-30 *Cardamine hirsuta* L. Kn # 39, Bon 37
Bon 27, B & H. 34 Walls etc. common above Farnalutx.
Plant more delicate & with much fewer basal lvs
than ill B & H. but quite like ill Bon. Fls fr.
Plant bright green & looks glaucous but has a few
almost erect white hairs esp. on upper side of lvs.
Seeds flat minutely granular, accumbent.
(See 4-14-30)

3-19-30 *Geranium rotundifolium* L. see 3-11-30) Near Farnalutx. Plant ● 2 in high ● Peduncle ● almost basal.

3-19-30 *Ceterach officinarum*. Willd Kunt 259
Bar 520, Bon 377 = C. — DC BVH 588 (ill). Above Farnalutx.
Frond $3\frac{1}{4}$ in long past young since scales are silvery
white. Older fronds scales brown. Indurators
have few scales & edges above are overlapped by scales
from beneath. No spores. (See 3-26-30 spores.)

3-19-30 *Scelopendrium Hernionitis* Sw Kunt 259,
Bon 380 = S. — Lag & Roxb Bar 523. (See BVH 587 for
desc. of genus & BMJ CP ⁵⁸ Phyllitis) Sp. on wall of water
hole at end of bridge above Farnalutx.

3-19-30 *Selaginella denticulata* Spring Kunt 267 = S.
— Koch Bar 527 Bon 385. L vs show denticulate only (20x)
Spores: large ones, 4 in case and small orange colored ones
many in case, in axils of lvs of small lateral branches
that otherwise seems like sterile branches. (See 3-26-30)

3-19-30 ? *Sedum dasyphyllum* L. ^{forma glanduliferum Roem} Kunt 42 Bar 181 ^{Green}
~~Bar 181~~ See S. — L. Bon 112, BVH 167 ill, BMJ CP 319
No fl but what is past remains of last yrs fls.
Above Farnalutx. (See 4-14-30)

3-19-30 *Sedum stellatum* L Kn II 40, Bar. 181, Bon
110. No fls but what is left remains of last yrs fls.
Above Farnalutx (see 4-14-30)

A
3-19-30 ? *Vicia*

No fls fr. Prob above Farnalutx. Small delicate plant,
branched from base, spreading to 3 in. St very
delicate but not soft or lax, angled, dark colored,
slight puberulent. Lower lvs 1 per lft, upper
lvs 2 per lft, tendril reduced to very short
appendage. Lfts very short petiolate, obovate 5 mm x 3 mm
mostly truncate at apex with very definitely mucro,
etc. Almost entire, veins show plainly beneath
3 (or 5?) - veined from base. Pubescent when young
& continuing somewhat so. Stipules small,
half spear shaped, but little if any toothed otherwise,
when young with bright purple spot. One branch
from base basal lvs with 1 per lft narrowly lance-
olate 10 mm x 3 mm.

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3-19-30 ? *Festuca geniculata* Willd var *tenuis* Kn I 32
Grass on walls above Farnalutx. Roots delicate fibrous
(not annual) St very slender 6 mm or less high
with several lvs, the upper lvs sometimes over-
topping infl. - $\approx \frac{1}{2}$ mm wide, pubescent with spread
in hairs. ● ligule ● membranous ● ovate, dentate

= *Vulpia tenuis* Pers Bar 507

3-19-30

dentate, almost $\frac{1}{2}$ mm high. Infl 1 cm+, a very contracted panicle (almost a raceme, not 1-sided). Spikelet flattened about 5-fl, the upper fl sterile. Lower glume very narrow $2\frac{3}{4}$ mm long including awnlike tip, green & ^{scabrous} roughened on back with white edges, 1-nerved. 2nd glume 3-nerved, broader $3\frac{3}{4}$ mm long inc tip, broader white margins, mid-nerv a little scabrous at top. Lemma 4 mm. 5-nerved, broad white margined, bi-dentate, mid nerv prolonged in scabrous awn extending 2 mm beyond lemma tip. Palea white, thin with 2 scabrous nervs prolonged at tip into 2 awns $\frac{1}{2}$ to $\frac{1}{2}$ mm, thin tip reaching to tip of lemma (not tip of awn of ^{anther} ~~stamen~~) Stamens 3. Rachis of spikelet minutely pubescent at base of each floret. (See 3-30-30)

3-19-30 *Myrtus communis* L. Kn # 218, Bar 174
Bon 167, BMGC. P. 535 Fr. Above Fernaldx (just below point where we turned back) Ripe ^{3/4 in long} fruit looks much like blueberry. Branches strewn in streets of Fernaldx in St. Joseph's Day celebration.

3-19-30 *Calyptoma spinosa* Link Kn II 58 Bar 104
Bon 69. On path just beyond above. 7-10 fl. Remains
N fr (See 4-4-36)

3-19-30

Tree in garden Hotel Ferro-Carril Solles. Fr. Lvs opp. ovate $4 \times 1\frac{1}{2}$ in acuminate, narrowed at light-
ly but rounded at base (hardly tapering)
on flexible twisting petioles $\frac{5}{8}$ in long, ex-
stipulate, entire, coriaceous & look evergreen,
glaucous, dark green & shining above, lighter
beneath. Lvs (only old ones observed) show (20x)
darker green dots ^{stomata} often covered by minute
gray scale as tho lvs had been more or less
scruffy when younger. Fr in ^{ample} drooping
terminal panicle, 6 in long. Fr a dense
oval, $\frac{1}{4}$ in long, bluish black, which detaches
leaving calyx (disk like perhaps & lobed) on st.
Stone & wrinkled. Poss a *Chionanthus* or if
not poss. *Ligustrum*.

3-19-30 *Euphorbia characias* L. Kn II/60 Bee 418
Bon 277 Bon 405. Fl & ^{very} young fr. Above formal 1x. Besides
terminal umbel there are a few very arranged rays
a short distance below. The brown gland almost
truncate outside, sometimes with slight hollow
but not acuminatae. The sapules covered with
long white hairs but not "punteada de blanco";
lower lvs. oblanceolate 7×1 cm (not proportions of Bon.)
middle & upper lvs. least widened at tips $5 \times \frac{1}{2}$ cm.
(See 3-26-30

3-19-30 *Clematis cirrhosa* L Kn I 482, Bar 7. Indian
Bon. See Kn III Pl XXXVII for lvs. Fr. Shortly above Farnalutx.
Pedicel at or invol. pubescent. Ovary & carpels purple
with with long greenish white silky hairs. (See 3-26-30)

3-19-30 *Polygala rupestris* Poir. (See 2-24-30) Above
Farnalutx.

3-19-30?? *Microseris*
^{modly} above Farnalutx 20 fls fr. Plant with almost
capillary, wiry woody st. much branched near
base & with some longer decumbent st. St. pubescent.
Lvs. opp. on short 1 mm ^{pubescent} petioles which form ridge a-
round st. at base. Lvs broadly ovate $3-3\frac{1}{2}$ mm $\times$ $2\frac{1}{2}-3$ mm
broad ^{entire} acute subcordate at base, green above & glabrous
above, the mid. nerve only distinct, bright purple
beneath, a few hairs on mid. nerve and 2-4 lateral
nerves visible, edges somewhat revolute. Internodes
except at tips 3-4 times as long as lf. Lvs firm, becom-
ing coriaceous with age & falling readily. St. pro-
squamish but without definite angles, hairs of
puberulence point downward. No odor when lvs
crushed. *M. biflora* Benth var *Rodriguezii* forma *filiformis*
Kn II 348 = *M. filiformis* Benth Bar 360, Costa III 72
Willd. # 69 Tab CXXIX.

3-19-30 ? ? *Rubia perigrina* L (See 3-11-30) Above
Fornalutx. No fl or fr. Lvs stiff & very dark green but
diff from 3-11 in being in 4's & broader to 9 mm.
(See 4-18-30)

3-19-30 ⁸*Phagnalon sordidum* ^{DC} Kunt Bar 337,
Bon. 160. Near Fornalutx. In bud too small to see
clear of fls but agrees with desc otherwise. Almost surely
this.

3-19-30 ¹*Psoralea bituminosa* L. Kunt # 104, Bar 135
Bon 84 Bud. Near Fornalutx. St. black. (See 4-4-30)

3-19-30 *Sorbus domestica* L. Bar 167, Bon 103 BMXP
381. Fl bud. Tree in garden shortly above Fornalutx.
Young ^{seemingly} shoot $2\frac{1}{2}$ in issuing from glutinous bud
scales, with young lvs & fl. buds. St, lvs, calyx etc
tomentose. L fls dentate only upper $\frac{7}{8}$'s. The five
stiles woolly at base. Note the 1 to usually 3 long
linear (pet) deciduous bracts at base of calyx.
Calyx tips red at this stage.

³
3-19-30 *Vicia*

Fl. Near Fornalutx at luncheon place. Fl. solitary

3-19-30

solitary so acc to Bar. either *V. sativa* - *angustifolia*
lathyroides - *peregrina* - *amphicarpa*. Fl 10 mm
long, only 1 kind of fl found, lf & calyx not as in *V.*
peregrina hence evidently *V. angustifolia* All.
A much more delicate plant than *V. sativa* L 3-17-30
cf. lfts $\frac{3}{8}$ - $\frac{7}{16}$ in long.

3-19-30 ? *Nasturtium officinale* Br. Kn# 29 Bar 35
Bon 25, Bon 29 Irrigation trench just outside Farnalutx.
Fls mostly in bud. Seeds in 2 rows and no queation
of ident except that lvs are not as remembered nor
like ill Bon and Bon 29, the sessile lance-ovate segments
are all pointed inc. the terminal ones & mucronate &
lvs have very low keels & rather mucous around
edges. St. hollow elongated in water with swollen
fruits under. Crushed lf has water-cress smell. =
Roripa Nasturtium-aquaticum Hayek B. M. J. CP 309

3-19-30 *Hedera Helix* L. Kn# 223, Bar 315, Bon 136 B. M. J. 211
B. M. J. CP 559 Fr. & fl just past abscission. Near Farnalutx.
Seed usually 1, sometimes 2.

3-19-30 *Arundo Donax* L Bar. 490, Bon 354 B. M. J. CP 122
Fr. (pess.) in water course with stepping stones above

Fornalutx. St. hollow, w smooth on edges. Branches
of panicle rough. Glumes prot 3-nerved, lemma
3-nerved with 2 intermediate nerves at base,
the 3 nerves prolong into 3 narrow teeth & an
awn between. Ligule short & membranaceous
(see Bon 346) but see B.M. of C.P. 122 "throat of sheath with
hairy tuft. See Riviera Natua. Notes. pp 7-104. caps as to
scanty flowering on Riviera (See 10-23-30)

3-19-30 ? *Potentilla reptans* L. Kn # 51, Bas 158 Bon 78
BVH 142. ^{id} If only collected but almost surely there
near Fornalutx. (Seen also by only Bellver, v fl 4-20-30)

3-19-30 *Punica granatum* L. Bas 169. No fr or fl.
Young lvs just appearing looking exactly as in
Bermuda. Fornalutx

3-19-30 *Euphorbia japhura* L. (~~See 3-14-30~~) Fl & young fr.
Near Fornalutx. St 15 in high. Kn # 156; Bas 417; Bon
252; BVH 407 (all).

3-19-30 "Wild peonies & the evil-smelling Arum"
reported as in fl. Pollensa - Fornalutx
very recently.

3-35-30 *Buxus sempervirens* L.

Shrub in garden Infanta's 8 ft high ^{tree} ^{tree}
slightly puberulent in shallow groove bet. lvs.
Lvs opp. oval or ovate, on very short petiole, (2) 18x7 mm,
light green (H) 20x11 mm dark green; Coriaceous, en-
tire, narrowed at base, obtuse & slightly flattened at
apex, glabrous, along mid-rib beneath a light
(whitish) line composed of tiny dots (20x). Fls in
sessile axillary clusters. Perianths of 4 thin small
bracts, 2 oval, the other 2 a trifle larger & 3-lobed. Stamens
4 opp the sepals, filaments 4 mm long, anthers
2 mm, yellow, introrse. Bet. the stamens at their
base what would be thought to be stigma,
fleshy, rectangular with a notch in each
side to accommodate filament. No sign of ovary.
Prob. divaricata. [4-11-33 this again studied
& found to be *Buxus sempervirens* Cotte at 223-
Bon 283, B & H 404, B & G. P. 458.

3-25-30.

Liliacea in garden Infanta's. Fl. campanulate
3 cm + across. Perianths seg. ovate lanceolate, 1 1/2 mm long
dark blue with darker band down middle outside
Stamens 6 attached to base of seg. the filament blue

broadened & fleshy in lower half, narrowed
above, reaching slightly above middle of seg.,
anthers white or yellowish, seem to be attached in
middle of back, introrse. Ovary superior, 3-celled
with many ovules on axile placentae. Ovary
dark blue, ovate, tapering upward to sessile stigma.
3 whitish ciliate or papillate lines on outside mark
position of cell walls. Gardner says this grows from
very large bulb. Lvs strap shaped, not stiff to 2 ft
long $\times 1\frac{3}{4}$ in wide, tapering slightly to tip $\frac{1}{2}$ in
wide (prob blunt). Lvs somewhat bluish blue in
middle but not beelid & no definite mid-rib
Edges with narrow (almost need microscope to see
it) whitish membranaceous border very
short ciliate (or papillate). Fls open before scape
has emerged from ground, but by time terminal
fls had opened 4-6-30 scape was 10 in to base
of infl & infl 9 in more. Scape solid $\frac{3}{8}$ - $\frac{1}{2}$ in ^{total}
Pedicels $2\frac{1}{2}$ in ^{long} below, 3 in near top & 1 in at tip.
spreading. Pedicels ^{each} subtended by a narrow
lanceolate bract, the lower ones 6 in long,
decreasing until uppermost are $\frac{1}{2}$ in long.
Bracts light green more or less whitish toward
base, entire. Could this be *Scilla peruviana* L
B.M. C.P. 163 (listed in Cat. of Casa Veyat, Valencia
where Dr. Cardell Pennel took).

3-26-29 walked up gorge just east of Genova taking every right turn until came out on top of ridge & dropped down to auto road which at length crossed the Genova-Son Papiña Road & home. Spec. collected in gorge as noted & rest indicated as "road home". This seems to be part of rd bet. Palma and

3-26-29. *Eclium creticum* L. forme *plantagineum* Kn II 310 = *E. plantagineum* DC. Bar 323 = *E.* — L. Bon 223, B.H. 320, all quite like spec., BM of C.P. 626. Fl. "Road home", seen also in short cut at end. Cfd with *E. calycinum* Viv from roadside near Infanta 8. Infl. is in form of numerous 1-sided spikes each in axil of reduced lanceolate lf. the st. of spike naked for about 2 in from base to base of lowest fl. These spikes forming long terminal panicle. (This dif from infl of *E. calycinum* whose infl. consists of sessile fls on upper part of lfy. branches, the upper fls in axils reduced but the lower ones extra-axillary). Fls bracted, the lower ones extra-axillary. This char might seem to point to *E. sericeum* Vahl acc to Bar = *E. creticum* L forma *prostratum* acc to Kn. but other considerations seem against this. Corolla a vivid purple 1 in long, about 3x as long as calyx. & longer stamens about as long as

upper corolla lobes. Calyx lobes lanceolate acute,
with prominent light colored nerve. Bracts
similar, longer, but somewhat sickle shaped
v broadened inequilaterally at base. All lvs.
inc. basal ones very plainly nerved (nerves
prominent below) v less rough to touch ^{to petiole} E Caly-
cium.

3-26-30 ? ~~Bladiolus segetum~~ Ker Kunt 396 = G.

— Gaul Bar 448, Bon 305 Fl. 1 spec. only on "Road
home" others of same general appearance seen
from tram near Dénora. Very diff. to distinguish
bet. *G. illyricus* Koch v *G. segetum* (Hank) Ker. Filaments
v anthers both 11 mm (anthers certainly not shorter
than filaments. Like wire as desc. Bar. the 3 lower
seg. v esp the 2 smaller ones with narrow white
stripes bordered dark in center. seg. not markedly ap-
iculate. Lower spathe valve 30 mm, the upper 43
mm extending well above the fl but 10-15 mm
shorter if full length of fl is considered. Fls. making
making 2 rows on same side of st. Lvs 7-12 mm
across. But ovules look ^{very much} as tho they might be
winged when ripe. (Note made 4-13-30 on studying
G. col. 4-4-30 v 4-10-30. This on evidence of ovules is
~~proof~~ *G. illyricus* Koch Kunt 397, Bar 448, Bon 305)
See 11-27-30

3-26-30 *Barbisia latifolia* Benth Kunt 396 = *Eupogon*
latifolia Briet Bar 348, Bon 239. Aieona gorge.
a short way from entrance. Pl. (looks like annual)
3-4½ in high. Lvs opp. oval 9x6 mm, palmate veined,
coarsely 5-toothed ^{edges revolute} the floral ones (bracts Bar) out to
about middle. Above the first 2 distant pair the
st. is naked for a distance longer than internode
before lowest fl. lvs. Calyx 5 mm (lobes 2 mm) tubular
whitish with 4 green veins ending in the 4 green
lobes which are lanceolate with edges revolute.
Corolla projects 3 mm beyond calyx, the upper lip
purplish, a hood, pubescent on back, the lower lip
spreading about 1¼ mm longer than upper,
with 3 entire lobes of which the middle one is
narrower whitish but purple around edges.
At base of middle lobe 3 distinct oval, rounded,
yellow protuberances ^{upward}. This would seem to point
to *Teixagopaula* Elv Bar 347 but lvs are not
lance-linear, capsule not ovoid globular, pub-
escent) stamens 4. sides in. anthers slightly
wooly & apiculate at base, style ^{slightly} pubescent, stigma
globular & relatively large. Capsule oblong, pointed
slightly curved, smooth, perisperm. about long as calyx. Seeds
many. (See *Teixagopaula* 4-4-30)

3-26-30 *Orobanche ramosa* L. forme *Caesia*,
 = *Phelipaea Caesia* Reut. Bar 349 (See also Bon 241
 & B. N. 333) Fl. Senora gorge. 6 cm to 11 cm high.
 Calyx 4 lobed, the sinuses deeper from apex. Petal
 with 2 white protuberances which do not cover
 throat. But style somewhat gland-pubescent
 & filaments practically glabrous ^{except at base}. Not angu-
 lar & bran-like pubescence not obvious as whole
 plant is glandular pubescent. Fl 15 mm overall
 Capsule 1 celled with ∞ ovules on 2 parietal placentae
 Sep 4-25-30

3-26-30. ? *Lotus tetraphyllus* Murray Kunt 100 = L. — L. f. Bee 132
 No fl or fr. Senora gorge. Luncheon place. 1 inch
 of horizontal underground woody but slender
 st. (or root) & from it ascending at diff. points very
 slender sometimes branching str. 6 in with
 appressed, upward pointing white hairs. Lvs alt
 3-foliate. Petioles 3 mm. Lfts. triangular 8-9 mm
 x 6-7 mm, the base acute, apex ^{acuminat} truncate or retuse
 with mucron, entire, pubescent, the midvein
 showing distinct beneath, above no definite
 veins a dim marking of lighter green where
 veins would be. Stipule 1 similar to lft but
 oblanceolate & obtusely pointed, about 5 mm. Buds
 of new lvs in some of axils. Internodes sometimes
 more than 2 x length of lvs (See 4-7-30)

3-26-30 *Galium murale* All. Kunt 425, Bas 224
Bon 142 Fl. unisexual fr. Kinross gorge Luncheon place.
5-10 cm high, not distinctly 4'ed with few weak
downward pointing pinnules in axils, along 5-6 mm
long, bipinnate, all hairs pointing upward, tips
narrowed to definite mucronate point. Fr
made up of 2 cylinders: 1 a continuation of the very
short pedicel & the other beneath it, this latter bristly
& broad basally at apex. deflexed. (See 3-30-30)

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3-26-30 *Asterolinum Linum stellatum* Duby in DC
Kunt 368 = *A. stellatum* Link V Hoff Bas 304, Bon 209.
Fl. unisexual fr. with above. 3-4 cm. high. branched but
not like ill Bon 205. Calyx 5 mm wide, corolla 2 mm
wide & not persistent ^{around} capsule or remaining only
in shreds. St. sq. Pl. light green, the lvs sometimes
with tiny dark dots (like *Anagallis*) and with
denticulations so fine as to be hardly visible (30x),
only mid-nerve shows & that vague. Calyx with
dark mid-vein distinct.

3-26-30 *Arenaria serpyllifolia* L. (See 3-16-30) Fl. with
above. Sepals 2x as long as petals.

3-26-30 *Cratium vicosum* L. Kn# 454 Bar 70
 Base = *C. glomeratum* Thunb Bar 52 & (See Box 74)
 Unisexual buds. 24 with above. $2\frac{1}{4}$ in high. Lvs short
 & broad. Fls agglomerate. Pedicels shorter than calyx.
 2 petalons.

3-26-30 *Centranthus Calcitrapa* DC. Kn# 435 Bar 227
 Bon 144. Bud. Near above. St 1 in high, also spec 5 in high
 (See 4-14-30)

? See AUB 3-30-30

3-26-30 *Valerianella eriocarpa* Desv var *truncata*
 Loro Bar (See 3-14-30) Fl. Near above. Lvs sometimes
 slightly hispid on edges. Bracts not only pointed
 at base but slightly winged as they clasp infl.
 [Perhaps *V. indicatropa* Loro See 3-18-32]

3-26-30 *Lonicera implexa* Ait. (See 3-14-30) Wall on
 "Road home" Fl. in axils of upper 4 pers. fls. which
 are joined to make a cup. Lowest pair has 1 fl, 2nd pair
 6 fl., 3rd pair 6 fls. Pink in bud, lighter as they mature,
inside pale yellow, not pubescent nor slightly
 any. Except inside of tube (See 11-27-30)

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3-26-30 *Hypericum balearicum* L. (See 3-18-30) Flops. near
 gorge. Fl. $1\frac{3}{4}$ in across. Petals clockwise. Stamen in
 5 distinct bundles

8-26-30 *Arbutus Unedo* L. ~~Bae 298~~, Kn ± 258, Bae 298
Bon 201, B & H 200 BMQC.P. 579. Fl (on 1 shrub only) v fr. partly
colored. Sinova gorge. Near luncheon place. Common.
Filaments white, fleshy, narrowing to slender
apex, pubescent. "Owos" on anthers seem to be
bars at pores (nothers found) Larger fr. $\frac{1}{4}$ in
diam. several ovoids in each of 5-cells. ^{Fr.} Seems to have
slight strawberryish odor. Barbaresc BMQC.P. Young
st. red. Corolla loosely pubescent inside.

8-26-30 *Juniperus oxycedrus* L. Kn ± 291, Bae 430
Bon 373. No fl or fr. Sinova gorge. 2 stripes on top of
lvs (verticillate in 2's) plainly marked.

8-26-30 *Impatiodesma mauritanica* Dur v
K. I 304 ~~(*Impatiodesma*)~~
Schinz = ~~*Impatiodesma*~~ *Herveyi* L. (should this be Link?) Bae 491,
part = *Arundo mauritanica* Desf Bon 354.
Early flv remains of last season's fr some fit adequate
for study. Sinova gorge. Lvs to $4\frac{1}{2}$ ft. x $\frac{5}{16}$ - $\frac{7}{16}$ in wide
glabrous shiny dark green beneath, lighter &
glaucous above, concave, tapering to very long,
very narrow pet. very rough with definite up-
ward pointing prickles on edges. Ligule white
membranaceous, 1 in long pointed, hairy on edges
below. as sheath hairy at base on one edge for

some distance below ligule. Glumes 3-nerved
keeled tapering to short awn. Lemma 5-nerved
bidentate, the mid nerve prolonged into short
awn. Palea with 2 distant nerves prolonged
into short awns. (Duncy; was this not also true of
Arundo Donax 3-19-30). Rachis & Callus hair & lemma
with hairs on middle of back ^{below} about halfway, otherwise
glabrous. Hairs much shorter than lemma.
Lemma white margined toward tip. Stems
of infl rough (See 4-10-30)

3-26-30 *Cytinus Hypocistis* L. Kn I 439, Baz 409
Bon 227 Fl parasite on *Cistus altiss.* Lemma
gauge. $3\frac{1}{4}$ in high. St thick & fleshy with scales
loosely overlapping, $\frac{3}{4} \times \frac{1}{2}$ in oval, obtuse, bright red
at tips. Fls indurac head like spike at tip of st. the
lower $\frac{1}{2}$ in long, the upper $\frac{3}{4}$ in. Floral bracts sth like
those on st. red, a broad one at base of fl & 2 narrower
at sides, a little higher up on fl. Perianth cream colored,
4 parted. Stamens 10. In $\frac{1}{2}$ fls. a knobby ridged body
(like stamens in appearance but sterile) at top of
central column. Ovary of $\frac{1}{2}$ fl seems 1-celled with
large sticky masses on parietal placentae but
no definite ovules found. Perhaps very small at this
stage. In $\frac{1}{2}$ fl. central column merely enlarged at
base. Perhaps this is "estigma discoides".

3-26-30 *Viola arborescens* L. Knott 209, Bar 3 Bon 37
Fr v. very faded fl. keinox gorge. The decumbent st.
6-12 in. Woody v. almost naked below (lvs having
fallen), brown rather than "gray", red in upper
part. Lvs. sometimes with very few, very low
teeth. Sepals narrow lanceolate, acuminate,
ciliate with ^{few} at base. i.e. a somewhat triangular
flange standing at rt 45 to rest of sepal. Seed brown
ovoid, attached to placenta a narrow end at the
point connected by line with opp end which has small
disk terminus. Capsule a little longer than sepals
(See 4-4-30; 11-6-30)

3-26-30 *Polygala rupestris* Pourr (See 2-24 + 3-26-30). Fl.
with above.

3-26-30 *Euphorbia characias* L (See 3-19-30) keinox
gorge. Fl v. unique fr. Common. Capsule begins to show
the white spots not visible 3-19-30.

3-26-30 ? *Euphorbia dendroidea* L. Knott 151 Bar 414
Bon 279 Fl. on rocks west side of keinox gorge bet.
entrance v. fort. Spec collect branch once only but
much like ill Bon v are naked at least to base of
branches. St. brown v woody, branched red.

Lvs. linear $1\frac{5}{8}$ in $\times$ $\frac{3}{16}$ in, glaucous, mid-veins prominent beneath but netted veins showing faintly (20X), entire, the acute point pinched together & looking as tho pointing downward. Lvs more or less at rt LS to st, neither definitely reflexed or pointing upward. Invol. lvs like st. lvs but broader ⁴ovate-elliptic) Umbels of 1-5 rays bifurcate usually with a central sessile fl which seems always sterile. Bracts yellowish-green, semi-circular, narrowed at base. Glands 4 yellowish more or less truncate & dentate not semi-lunar. The very young ^{3-cornered} fl smooth, no sign of white spots, scales smooth.

3-26-30 *Euphorbia helioscopia* L. (See 2-25-30) Fls v fl. Sierra gorge. Seeds, brown, pitted the thin ridges grayish.

3-26-30 *Eryngium Campeche* L. Kunth 223 Bce 214 Bon 135, B & H 186 ill. Fl. "road home". Invol bracts somewhat spiny but not at all as def. tooth as ill B & H #402. Calyx teeth surpassing petals by 1 mm. ovary covered with linear white scales.

3-26-30? *Hippocrepis unisiliquosa* L. Knott 113
Bar 150, Bon 91 Fl. "road home" near panoramic view
at top elsewhere. Ex. Drofs. Leaves show none of char
of fr as desc. but this seems only legume in Bar
with odd-pinnate lvs & 2 sessile yellow fls in
axils. Plant prostrate with many ray like branch-
es from base 2-4 in long. Branches simple & sts.
relatively thick. - vult $1\frac{1}{2}$ in long ^{ing. petiole} of 13-9fts the
lower pairs often not exactly opp. Stipules free,
lanceolate 3-4 mm. acute, ciliate towards apex,
green with indefinite whitish border. Lfts oval
oblong 3-4 mm x 2-2½ mm entire, mostly definitely
notched at apex and mucronulate. St & lvs glabrous.
Fls yellow, 1-2 almost sessile in upper axils, 8 mm
long. Calyx 4 mm. slightly puberulent, rather 2-lipped
the upper 2 teeth being longer than the rest &
united more than ½ way to the acute tips. The
other 3 narrower, more sharply acute & with
wider sinuses. Standard longer than wings &
wings equal to or a little longer than beak when the
freshest fls studied 3-29-30) inclined to curl over onto
it. Claw of standard raised above other claws so one
can see daylight thru the lateral sinuses of calyx.
Stamens diadelphous, some of them relatively very
much enlarged just at apex. Style narrow, flat
for ½ ft with small stigmatic surface at tip.
Ovary linear, glabrous, 6 angled, not divided by

longitudinal partition, seems 1 cell.

Standard mucronate. Cfl with ? *H. ciliata* Willd 3-28-30
Calyx lobes & anthers shaped much like latter & disk
has same hard, mussy part behind.

3-26-30 *Anthyllis Cytharoides* L (See 3-4-30) But
note that terminal lft is often not linear but
ovate lanceolate to 25x9mm. And ovary linear
& 10 noded. Calyx lobes narrowly linear at tip
the upper ones more widely separated than
the others. Fl. near above.

3-26-30 *Hypericum perforatum* L. Kn II 186, Bar 86
Bonks Box 84. Last seasons infl & young shoots
20 ft. Note opp ridges on st continuous for 1 internode
only. "Road home"

3-26-30 ? *Linnaea*

Near top of road home. No fl or fr. Low shrub. St & lvs marked
by glandular pubescent. St with very short internodes
& very lfy. - is alt suggestive of Rosaceae. Lf $\frac{3}{4}$ in
long ^{in fl} petiole, with lanceolate stipules which
clasp the st. Stipules slightly toothed on outer side
near base, acuminate. Lf 5-foliate, pinnately,
occasionally 3-foliate & often with an extra lft
growing ^{near} the lower lateral lfts producing
an irreg 6-foliate effect

8-36-30.

effect. Lfts sessile, oval, 10×4 mm, all about same size or 2 lower ones somewhat larger. Distinctly toothed from short distance above base, perhaps doubly toothed near apex.

8-36-30 *Dorycnium pentaphyllum* Scop. Kunt # 101
Thearator. Low shrub. No fr. Fl. buds too young for much study. St brownish & warty with remains of the appressed silky pubescence found on young sts & lvs. Lvs alt. sessile with minute stipules, digitately 5-foliate. Lfts narrowly oblanceolate 10×2 mm, entire, tapered to base. Internodes sometimes shorter than lvs, often much longer. Fls terminal in groups of peduncled (peduncle now very short & very silky pubescent) heads, each head evidently subtended by 5-digitate lvs like those on st. Calyx tubular, very silky pubescent 5-toothed of which 1 tooth seems longer. Petals present (not sure of number. Ovary has look of Leguminosae but the 10 stamens seem free (perhaps not later).
Consider possibility of *Dorycnium pentaphyllum* Scop. Kunt # 101, which inc. *D. suffruticosum* Willd (Vill?)
Bar 128, & *D. suffruticosum* Vill Bon 81 (See 4-20-30

3-26-30 *Silene Cucubalus* Whit Kn I 463 BVA 65
ill. = *S. inflata* Sm Bar 58, Bar 43. Bud "roadhorne".
Petals in bud imbricate, i.e. some entirely outside,
some entirely inside the rest overlapping with one
side out & one side in (See def. BVA XXIV) St. to 18 in
high, v. like lvs glabrous & glaucous. Lvs ovate-lanceolate
to $3\frac{1}{2} \times 1$ in, the lower ones mostly gone but seem
narrowed to what might be called petiole. Infl.
seems to be dichotomous cyme as in all BVA #135
i.e. 2 terminal branches with a fl. bet. which
matures before those on branches, the branches
branching in the same manner at least 2 times
more. Calyx at this stage $\frac{1}{2}$ in long, bladderly, the
netted veins not strongly marked. Petals winged
at base of blade. Note calyx teeth have very short
wooly pubescence on edges

3-26-30 *Polygala monspeliaca* L Kn II 143, Bar 56
Fl & young fr. ^{Bar 40} Bud "roadhorne". $3\frac{1}{2}$ in high. Large sepals
 6×8 mm (2x as long as broad Bar). Cfd. with *P. superlatris*
3-26-30. Lvs shorter 11 mm (*P. superlatris* 15 mm), less firm
more lanceolate & acuminate. Close together on
lower part ($\frac{3}{4}$ in) of st. instead of more or less
distant on long lax trailing sts.

3-26-30 *Cynoglossum cheidifolium* L. (See 3-16-30)
Fls well advanced fr. All tubercles seem to bear
hooklets (tiny heads of more than one hooked point) But
see Bon 225 "aquillons extrêmes de tubercules".

3-26-30 *Plantago Lagopus* L. (See 3-11-30) Fl. "road
horn" Buds long hairy on upper part of back
as well as ciliate. Calyx ^{parts} ~~lobes~~ ^{lobes} ~~lobes~~. Sepals 3 (even in
♂ fls see Bar 379) the anterior sepal with 2 green ~~nerve~~
the other 2 hooked green. Sepals otherwise hyaline.
Lvs 15 mm widest part & 2 mm at base of petiole
(See Bon) 3 nerves distinct, the 2 outside ones only
less so.

3-26-30^{??} *Medicago falcata* DC. Knuth 76 Bar 116 Bon 75
"Road horn" Buds & well advanced fr. Fr 1 or 2 or
sometimes 3 on slender peduncle about
 $\frac{1}{2}$ length of petiole. Fr flattened but with its $1\frac{1}{2}$ -
 $2\frac{1}{2}$ ^{2 rows of hooked} ~~very long~~ ^{very long} ~~spines~~ hooked, & much longer
than space bet. Stipules deeply cut. Peduncle
does not seem "aristate" But whole plant
inc fr glabrous (except few hairs on very
young parts. Lfts 1 x 1 cm (hardly frequent)
cili, etc. otherwise) Is this a form of *M. lupulina*
Baert? see following notes

it seems to resemble in every way except number of coils of fr.

3-26-30 ? *Medicago hispida* Gaertn forme
dentriculata Kn # 74 = M. pentacycla DC^{Bas} 116
(See Bon 75 V B V H 111 ill) Like above except that
fr has more than 4 complete coils so closely
pressed together that one cannot see daylight
between, slightly flattened but effect approaching
very globular.

3-26-30 *Coronilla juncea* L. (See 3-4-30) Fl. lemon
orange. 1 spec only seen.

3-26-30 *Fruca sativa* L. (See 3-4-30) Fl. lemon
orange (near entrance).

3-26-30 *Pteridium aquilinum* Desf (See 3-4-30)
Fl. lemon orange prod near entrance. Exsicc
flame purple on back at tips as well as purple
at base.

3-26-30 *Vinca major* L. B.M. CP. 605. Fl. escaped
at barrachos Genova gorge. Identified by ciliate lvs.
& calyx lobes. Lvs. margins ^{& blotched} cream color.

3-26-30 *Ceterach officinarum* Walld (See 3-19-30) Spores
Genova gorge. 1 spec. only noticed.

3-26-30 *Selaginella denticulata* Spring (See 3-19-30) No spore
observed. Genova gorge, not uncommon.

3-26-30 *Cyclamen balearicum* Willd (See 3-19-30)
Fl. Genova gorge. Not infrequent in upper part.
Sepals purple. Petals in broad veining, the rest whitish.

3-26-30 *Clematis aethusa* L. (See 3-19-30) Fl. Genova gorge

3-26-30 *Sibthorpia balearica* Knoch, Kn # 391
instead of *S. africana* Bar 345 (See Bar 239 and B & H
344 for *S. europaea* L.) Fl. very young fr. Genova gorge.
Desc. in Bar. Collect. Largest lf 15 mm long x 16 mm
broad. Fl. on peduncle 2 mm long. Calyx 2 mm
high, corolla extending 3 mm more. Calyx &
corolla lobes & stamens 5. Petioles very firm & to

Possibly this spec grew in more shade than
12-13-30 where petioles

43mm. Some peduncles longer than petioles
Corolla a pale yellow. (See 4-20-30, 12-13-30)

3-26-30 *Papaver hybridum* L. (See 2-25 & 3-17-30) Bush
side of Calle de la Salud. Anthers distinctly pale blue.
& stigmas 8

3-26-30 ^{XX} *Vicia sativa* L. var. *ampliuscapa* Boiss. Kunth II 116
Fl. Senora gorge, weak at 10-15m, angled & pubescent
lvs. enormous, sessile or 2 divided. 2 fls
4-5 pair, pubescent, lance-linear or linear 20 x
3 1/2 mm, acute & long & sharp mucronate (in no wise
reflexe or notched) Stipules half-sagitate, the lower
lobe entire or with 1-2 teeth, stipules of upper lvs
with dark spot. A few lvs at base toward base ~~and~~,
with no or reduced tendril, lfts broader, mostly
obtusely & mucronate, some reflex & mucronate.
Fls. solitary, almost sessile. withered when studied
3-30-30 but more than 1 cm long. No def. subterranean fls
seen & but suggestions of what may have been such.
(See 4-4-32)

3-29-30 † *Anthyllis tetraphylla* L. Kn II 92 Bar

113. ^{Box 93} Col. by Mr. Heron.

Fl. twig 6 in long

about 8 firm but prot. not woody, velvety. Lvsalt.
petiole broad $\frac{1}{4}$ in, ^{terminal lft} 2 4 x 16 mm, below this on lower side
of 4th petiole 3rd lft about half these dimensions & more
or less of this 3rd lft very small & at base of petiole
on lower side in a position that suggests stipules
4th lft larger than 3rd but much smaller than 2nd.
This arrangement varied in one case by an
extra lft bet 1st & 2nd. Lfts obovate (terminal one
very definitely so) entire & velvety both side.
No stipules unless the 4th lft is one. Fls in 5-6 in
axillary almost sessile head, subtended by
small 2-foliovell lft, of general appearance like
st. lvs. but lfts somewhat oblique, sharper pointed
& the terminal lft of only a little longer than #4.
[Note ~~these~~ this peculiarity of size of lfts not
mentioned in books.] Fl 15 mm overall. Calyx
11 mm of which the 5 sharp teeth are 2 mm. Calyx
tubular, velvety, & prot will be swollen. Stamens
^{dia} ~~mono~~adelphous, the 15th one free even in bud, ~~the~~
~~all stamens~~ the rest forming a tube to near
their tips, all stamens of same length and
inflated at their tips & then abruptly narrowed
as tho the long anthers were on short pedicels.
Style only just longer than stamens, stigma
capitate. Petals long clawed, the standard

pale yellow, silky pubescent on back, delicately
rose-veined inside, wings bright yellow & heels
purplish at apex. Ovary 2 mm, hairy, 2-ovuled, or
a, ^{pubescent} style 2 1/2 mm. [See BVH 131 & B.M.C.P. 415 for
genus] (See 4-10-30)

3-29-30 ? ~~Hypocrepia ciliata~~ Wedd, Kn II 13, Bar 150
Bon 91 Col. by Mr. Heur. Fl. branch
on upper part of plant 3 in high. It branched, angled
& minutely appressed pubescent. Stipules
small, free, lanceolate. Lvs alt. the petioles
decurrent in V shaped ridges on st. Lvs 1-1 1/2 in
inc. petiole, odd pinnate with 4-6 pr. of
oblong linear lfts 6 x 2 mm. Lfts show no distinct
nerves but are bent somewhat upward along
mid-rib trough-wise, blunt but ~~apex~~ mucron-
ate at tip, entire, almost glabrous above, but
with short white hairs appressed below like st.
Fls on axillary peduncles about 1/2 in long,
in a naked umbel of 7 or less fls. Pedicels
short. Calyx about 5 mm., teeth almost equal but
the 2 posterior with shorter, narrower sinuses
which terminate a ridge down back of calyx
& the 2 lateral sinuses deeper than the anterior
ones making a slightly 2-lipped effect. Calyx
with same hairs as lvs & st. Claws of petals
longer than calyx.

3-29-30

calyx, Corolla bright yellow, standard with dark-
er veins, keel pointed. Part of disk on which stand-
ard is seated hard & mubby, apparent even when
covered by calyx. Fl about 10 mm long, bent upward
from tip of calyx. Ovary linear, glabrous, 9 ovuled.
Stamens diadelphous & seem enlarged at
apex. Lobes of calyx fussy inside & on edges.
Cf. with ? *H. unsilignosa* L 3-26-30 (See 4-3-30
[But see also ? *H. balearica* Will 3-1-32]

3-29-30 *Melilotus sulkata* Desf (see 3-17-30) Col. by
Mr. Heron. Peduncle very definitely aristate &
racemes (older than 3-17-30) are longer than
lvs. Fr has same exterior char as 3-17-30 but I'm
not so sure fls being 1-ovuled.

3-29-30 *Ornithogalum umbellatum* L. Knt 378
Bar 436, Bon 296 B & H. 478, BM & C.P. 162. From Mr. Heron
Infl. only no root or lvs. St 9 in high
the lower 4 in prob underground. Fls in broad 4 in
open corymb. Lower pedicels to $2\frac{1}{2}$ in with very
recumbent bracts $1\frac{3}{4}$ in. Perianth seg. all pointed
the 3 outer ones to $\frac{3}{4}$ in, outside green with narrow
white margin, the 3 inner slightly shorter out-
side green in center only with broad white mar-
gin & tips. Filament dilated at base, anthers

dorsifixed. Stigmas somewhat 3-sided,
ovary 6-lobed & 3-celled, many-ovuled.
Ovary yellowish at top, greenish below.
(See 4-20-30)

3-29-30 ~~Roseum~~ *Allium roseum* L. (See 3-30-30)
Mr. Heron. Bulb covered with hard dark
brown scales & bulblets discovered only by
breaking this 1st white layer of bulb. Scape 18"
in high.

3-29-30
Serapis lingua L. (See 2-20 & 3-14-30) Col by
Mr. Heron. St. rises from oval but very bulb, with
thick roots at base of st. above bulb, one of them 1 in
long terminating in oval bulb $\frac{3}{4}$ in long.
Fls 2 on st. Bracts $\frac{3}{4}$ - $\frac{1}{2}$ in long, reaching
just to or a trifle beyond base of anthers. In the
uppermost largest of the lip is 6 mm wide at
widest part & 9 mm wide in middle lobe.
Note the 2 tooth-like projections at base of lip as in 2-20-30
& cf. with Bonnier's desc which says "une bosse".
Lip maroon, the lateral lobes very dark. Sepals
grayish pink, striped maroon, upper petals
~~dark maroon~~
are short ovate, with very long filiform tips
which are adherent to sepals & extend almost
to their tips.

3-29-30 *Bartisia latifolia* Buss. (See 3-26-30)
Mrs. Heron. St to 7 in. Calyx 10 mm of which 4 mm
is teeth otherwise as 3-26-30 with the same
2 yellow protuberances.

3-29-30 *Iris Sisyrinchium* L. Kunt 395 = *Lyandii*
—— L. Bar 447. Colby Mrs. Heron several days
previous Porto Pi. Fl. too withered to study but
almost surely this.

3-30-30 *Uphrys Beccalonii* Moret Kunt 403, Bar
460, Bon 312. Fl. Cas Catala gorge upper part
on way to Bendinat (Mrs. Heron also bot a spec
3-29-30) Sepals pink with def. green midnervs,
extended, to $\frac{3}{8}$ or $\frac{1}{2}$ in long. Petals a deeper
pink, a little more than $\frac{1}{2}$ as long & broad, not
velvety, very short & obscurely ciliate. Some
fls have a small protuberance on each side at
very base of lip. Lip very broad (its sides are
curved downward so it looks oblong), with
5 shallow rounded lobes, the middle one narrow
er & its tip curved upward in a small
blunt, glabrous appendage (snout-nosed). Lip brown
velvety with small shining smooth
glabrous spot a little forward of center.

The other spot (Bar) is at very base & some times obscure. Column inclined forward "like bird looking at itself in mirror" says Mr. Heron. Tubers ovoid rather than round

3-30-30 (*Ophrys speculum* L. Kn I 407, Bar 461 = *O. vernuxia* Bort. (But not found in Bar altho Kn. says it grows in France) Fl. Top of divide on path Cas. Catala-Bendinat & again in gorge below. "Tatlers plains" (Bar) must be translated "horizontal" to be true. Lateral sepals extended, curving more or less forward, green with 2 distinct purple-brown stripes (1 about in center, the other on lower edge) greenish on back, edges somewhat revolute. Upper sepal green tinged purplish but not distinctly striped, curving forward hood-like over anther, edges revolute. Petals tiny, velvety purple-brown triangles with relatively long tip that curl under the fl. Lip large with 3 narrow lateral lobes near base projecting forward & upward, the middle lobe large rounded, with its bent down to make sac-like effect & shallowly notched at tip. Lip edged with band of longish brown hairs, center shining & glabrous (very conspicuous) ● ● ●

3-30-30

conspicuous blue in center & yellow around edge. Column joined lip with a rough (glabrous but with velvety purple spot at tip) & lip forms a small downward projecting fold at point of joining (see 4-3-30)

3-30-30 *Uphrys bombyliflora* Link. Kunt 406. Bar 461 Bon 312. Fl. Cas Catala gorge upper part on way to Bendinat. Bracts spoon shaped shorter than ovary which in lowest fl. is $\frac{7}{8}$ in long. Sepals light green, ^{obtusely} extended or more or less curved forward or the upper one curved forward over anthers. Petals oblong, upright, much smaller, green with purplish bases velvety on face (Bon) not "casi lampiños" (Bar). Lip brown 3-lobed to base. Lateral lobes forming deep fold where connected at base with column, abruptly gibbous upward (like knees) & the lips pointing downward (like legs of insect), velvety. The middle lobe with edges turned under so as to appear almost globular, 3-toothed at tip, the outside teeth hidden under lip, glabrous, tip greenish. The middle tooth, glabrous green with ~~a~~ rounded ~~protuberance~~ near tip and tip curved ~~slightly upward~~, very obtuse with hair on its ~~very~~ base. The tooth overhung at its

[3-18-32 This desc. carefully compared with specimens from Bellas & with *O. atata* hull to be sure this really was *O. bombylifera*]

base by the hair edge of the main part of the central portion of lip (i.e. the central portion of lip seems divided in 2 folds (or lips) the lower green as ^{but} disc. ~~also~~ therefore & shorter a continuation of the surface of the main lip) The lip almost flat & round except for the hairy edge, & no sign of species "mancha lampiña blanca su base" (See 4-3-30)

3-30-30 *Ophrys fusca* Link (See 2-6 & 2-24-30)

Cas Catala gorge. Note that the glabrous half of lip toward base, always somewhat lighter than the very dark tip varies greatly in color, often dull purplish, irreg. longitudinal markings on a grayish ground but sometimes as in this case the ground so bright white that except for shape one might think of *O. arnifera* & *O. spegazzii* Mill. Lip is not "entero o brevemente escotado" as in the latter nor like *stellata* Bon. (BOTH 464 not much help.) It is 3-lobed with middle lobe broad & notched & like ill Bon. Lip slightly convex but edges not turned under.

3-30-30 *Allium roseum* L. Kn. F. 372 Bor. 439
Bor. 299 Fl. Highway west of Cas Catala (west of
8 Km stone) Pediceled bulblets at base very evi-
dent. Per. seg. rosy with darker line down middle.
Scapes to 14 in. Strong onion odor. Center of bulb
solid. (See 4-10-30)

3-30-30 *Xrospermum Delecharnieri* F. W. Schmidt
Kn. F. 516 = 2. — Desf. Bor. 281, Bor. 195 Fl. Highway
just west of branch to Portals. Fl. (cf. see *l. piceoides*
3-14-30) Several sts from top of black underground
st, & these essentially simple to 16 in high the
peduncle forming the upper half. At base flesh
peduncle a whorl of 3 lvs, long cordate clasping
 $\pm 2\frac{1}{2} \times 1$ in like other st. lvs except unlobed. & usually
a 4th lf shorter & much narrower. Fl. heads $1\frac{1}{2}$ in
high broad, rays a very pale yellow,
some of outer ones purple. Pappus hairy.

3-30-30 *Vicia sativa* L. (See) Fl. young
fr. At 8 Km stone west of Cas Catala, evidently a cult.
crop. St. 18 in high. Fl. when closed $1\frac{3}{8}$ in long. Wings
darker richer purple than ^{the rest} standard making
noticeable contrast. Fls. frequently 2 in axil
Peduncles articulated in middle, sometimes to

4+mm long. 4-5 to 2 1/2 in without tendril,
with 8 per. lfts.

3-30-30? *Vicia sativa* L (see above) Fl. bet Bendinat
& Portals. ~~St~~ not cult. St 6mm. Lvs 1 in or less with
4-5 per. lfts & tendril sometimes little developed.
Lower lvs & those on delicate sterile branches
from base with 1 or 2 per. lfts & no tendril.
Fl solitary ~~about~~ 12mm. long. Standard
purple with white spot in center above. Wings
purple, their claws & under part of lacin forming
a second white spot. In other respects much
like above. (Lvs not at all like ?? V. — var. *amphicarpa*)

3-26-30)

3-30-30 *Trifolium stellatum* L. Kn II 79 Bas 125
Bon. 79, Bon H 115 ill. Fl. Path bet Bendinat & Portals.

Note esp. the large beautifully veined stipules,
heads 1/2-3/4 in., the subulate calyx teeth, longer than
corolla & whole plant copiously & loosely white hairy.

3-30-30 *Ranunculus parviflorus* L. Kn I, ⁴⁹³ Bas 19
Bon 8, Bon H 11 ill. Fl. Path Cas Catala - Bendinat at aqua-
duct bridge. Plants 1 1/2 in high. Lower lvs 5-lobed
Capels 11. (See 4-20 30)

300 RBK

E. chinum Willd.

3-30-30 *Erechtium* Borys Bertol Ku II 130 Bar 84
Bon 59 B.M. & C.P. 434 Fl. Perhaps at top of pass on path
from Cas Catala to Bendinat. Lf. $3\frac{1}{4} \times \frac{1}{2}$ in on petiole
over 1 in long like ill Bon except upper part broad-
er. Whole plant 2 in high. Peduncle & fld from
base of plant or from bet 2 opp lvs at top of
short st. Petals entire, purple 5 mm long. Chasms
fld with those of *E. moschatum* Her. Vase sim-
ilar in the 2 depressions at top with the deep
concentric furrows beneath & stiff hairs on
back, but dif in that ⁱⁿ *E. Borys* the ridge bet
the 2 depressions forms a low tooth not present
in *E. moschatum*. Styles of *E. Borys* almost
glabrous, of *E. moschatum* with appressed
hairs. Note Barqns no record from Majorca
& Ku only 1 to the east of Palma. Does Bon mean
fr more than 8 cm. long! And (see B.M. & C.P.)
fertile filaments are not dilated & sterile ones
are oblong of about same width throughout to
the rounded top at height of base of styles.
stigmas [1-26-31] like this & undoubtedly *E. chinum*
see ill Costa I 352

3-30-30 *Salium murale* All. (see 3-26-30) Fl & unispe
fr. with above.

3-30-30 *Sagina apetala* L. (See 3-17-30) With abn.
very delicate plants $\frac{5}{8}$ in high. Fr. the sepals
extended in cross.

3-30-30 *Coronilla scorpioides* Koch. (See 3-4-30) Fl.

3-30-30 *Lithospermum apuleium* Vahl Kunt 307
Bar 322. Bon 222 (See BVH 321 for change genus) Fl. Top
of divide on path Cas Catala-Bendinat. $3\frac{1}{2}$ in
high. Lvs upright & overlapping. Anthers
on very short filaments at base of tube.

3-30-30 *Euphorbia exigua* L. Kunt 155 Bar 416
Bon 292. BVH 407. Fl. young fr. with above .2 in
high. Whole plant much more delicate than
all BVH, lvs & bracts narrower. Seeds (at this
stage) looks wrinkled (BVH) rather than
tubercled (Bar) & glands are brown with yellow
tips. This is forma *discoepidata* since
the tiny linear lvs are 3-jointed toothed,

3-30-30 *Geranium columbinum* L. Kunt 126
Bar 81, Bon 57. BVH. 96 ill. Fl. Path Bendinat-Portals
Ident. sure. ● But note ● sepals ● are not

3-30-30

not revolute on margins the 3 outer ones being even a little turned inward at base. Petals the length of sepals to base of the awl-like points. Petals irreg. ^{shallowly} notched but not divided into 2-lobes, almost blue, claws white & definitely ciliate. Basal lvs with petioles to $7\frac{1}{2}$ in

201

Kn I 462

3-30-30 *Paronychia caputata* Lamb forma *nivea*
= *P. nivea* DC Bar 179, Bon 109 Fl. Portals west side of road near fonda. Fl. Pl to $1\frac{1}{2}$ in high, branching & subterminal at base. Lvs opp. with the stipules bet. scarious acuminate & longer than lvs (at tips of sterile branches the stipules of unexpanded lvs. form white tuft.) ~ ~~vs~~ ^{fl} thick, lanceolate, 2-3 mm, acute, ciliate. Internodes often shorter than lvs esp. at base where lvs are often orange color. Floral bracts broad, obliquely rounded, sharp pointed. Perianth 3 mm, sepals unequal, long-ciliate. Cfd *P. argentea* Lamb (3-17-35)

3-30-30 *Poterium Sanguisorba* L var *muricata*

Kn II 54. = *P. muricatum* Bar 164, Bon 102, 384 177. Burd. Bet Portals & path from Bendinatto

3-30-30 *Scakia maritima* L. (See 3-14-30)
Fl. unripe fr. Near above. Note that upper part
of involucre is double: the outer part as desc.
2-14-30, the inner part a cylinder (deeply ridged
on outside & edge slightly thickened) enclosing
the stalk of calyx. Lvs. et. silvery pubescent.

Prob *Epetisura*

3-30-30 *Euphorbia*

Cas Catala gorge at aqueduct bridge. Remains
of fl. in poor condition. St. woody at base
18 in high, naked except for an occasional
shoot (as remembered ~~the~~ similar shoots
grew from base) with lvs glaucous, alt,
crowded, 20 x 5 mm, sharply acute, lanceo-
late with a few, low, irreg but sharp teeth
toward apex which disappear toward base.
Umbel of 5 slender rays, repeatedly 2-branched,
(no floral lvs, i.e. under umbel now present)
Below umbel (in one case to 3 1/2 in). All branches
into rays, sometimes simple (below)
sometimes once or more 2-branched.
Lvs on all these rays & branches, opp (no
stipules) sessile, orbicular, 5-8 mm long,
glaucous, denticulate at rounded top with mid. rib
projecting in a cvl-like point at or just
back of edge of lf. All branches bear an
occasional

3-30-30

occasional solitary fl. head in axil & also ^{max} near
1 (perhaps more) fls at tip. Heads yellow &
are prob rounded on outside (evidence insuff-
icient), capsule at this stage smooth. Could
this be E. pithyusa L. ? (See 4-18-30
forma uncinata)

3-30-30 *Valerianella coronata* DC. sub sp. *discoidea*
Rough form *multidentata* (see 3-17-30) Fl. Prob
bet. Cas Catala & pass on pass.

A

3-30-30 *Valerianella eriocarpa* Desv. var. *truncata*
Lac & Buz. Fl. In same region as above. This is prob
same as 3-14 & 3-26 [Perhaps *V. microcarpa* Lois. See
3-18-32]

B

3-30-30 *Valerianella* [*truncata* Betcher see 4-18-32]
Fl. Prob near above or in gorge or way to Bendinat
in high. Gen effect as A. but lower lvs. not
narrowed into a def petiole as in A. & upper lvs
not narrowed at base. Fls. very flattened & not
plump rounded as A.; its oblique top larger, more
open & with thinner edge than A. with no constriction
bet. free part of calyx & main body. This suggests
desc. of *V. microcarpa* Lois (Bon) this the ill (Bon)
& is more like *V. truncata* as compared with A.

Poss A is the *V. microcarpa* VTB is *V. huncata*.

3-30-30 *Asparagus stipularis* Forsk KnT 381 =
A. horridus L. Bar 442. (See 2-14-30) Fl. where
path ~~where~~ from Bendinat joins highway west of
Portals. Per. seg. 3mm long greenish with
white edges & broad purple stripe down center,
one on each side of each thorn branch. Tiny
scale under each thorn 7mm, acuminate

3-30-30 *Lotus ornithopodioides* L (See 3-17-30) Fl v
young fr. (old enough to show "nodosa") Bet. Bendinat
& Portals.

3-30-30 *Taraxacum officinale* Web var *obovatum*
Kn II 531 Bar ~~384~~ = *T. obovatum* DC Bar 384, Bon 186
Fl v fr. Bendinat - Portals, Lvs oval or obovate with
few short, downward pointing teeth below middle not
at all lobed or runcinate. But invol bracts have
on back below tip a tooth or protuberance (sometimes
2), does this make it ample *T. officinale*. See Bar.
and BVH 374.

3-30-30 *Olea europaea* L. Bar 308

Small tree on which S. & T. put his dash-dot dash in Cas Catala gorge path to Bendinat. Twigs gray, grooved in lines running from base of petioles. Lvs opp, exstipulate, coriaceous, oblanceolate, to $1\frac{1}{2} \times \frac{1}{2}$ in entire edges slightly revolute, tips broadly cuneate but sharp mucronate. Petiole 2-3 mm. ^{Long} dark green above, pale below. Young lvs have ^{Long} feltate scales above & all at lvs beneath more or less with same scales. Not

Phyllirea angustifolia L. coll. near by (Same as cult. olive col. later.)

3-30-30 *Anagallis arvensis* L. (See 3-4 & 3-14-30). Path at back of Bendinat Castle. Fl. red. A small patch of plants were the 1st with red fls seen in Majorca tho the blue fls are common everywhere.

3-30-30 ²⁷*Thymus capitatus* Hoff. & Link. ³⁵⁶ Bar 357. ^{Remains of fl. influence.} Low shrub, ~~no fls~~. Path from Bendinat to Portals on east side shortly before reaching highway. St. hard & woody. Young shoots thick & white with short stiff hairs. Lvs opp. making a cross when twig is looked at end on. - vs exstipulate with line of ^{stiff} hairs (longer than those on st.) joining their bases. - vs thickish, $7 \times \frac{1}{2}$ mm, linear

acute, entire, coarse ciliate at base, sessile
thickly sprinkled with resinous glands,
crushed lvs with odor suggesting furniture
polish. Internodes never longer than lvs even on
young shoots & at base of shoots where lvs are only 3 mm
long they are closely crowded & overlapping. Each of
lvs except these small ones at base of long has 2
small lvs in axil. Infl. Capitate, terminal on
last season's twig. Calyx 2 lipped, the upper
lip flat with its sharp edges stiff-white hairy.
3-toothed but teeth not "pequeñitos y de inter-
medio mas corto." Lower lip of 2 teeth, and
shaped v pectinate with stiff white hairs
Calyx densely bearded in throat. Seeds seem
~~round~~ globose. This seems only pers. in Bar.
but unsatisfactory (See 11-17-36)

3-30-30 *Festuca geniculata* Willd. var. *tennis* (See
3-19-36) Fl. Frequently seen, various places $1\frac{1}{2}$ to 10 in
high.

3-30-30 *Lagurus ovatus* L. Kn I 296, Bar 494, Bon
356, B V H 534 Will, B M J C. P. 113. Fl. Partial west side of rd
near fonda. 3 in high. See 4-10-30

3-30-30 *Salicetia tomentosa* Muench (See 3-4-30) Fl.

Meeting of path from Bendinat & highway west of Portals.

~~302~~ 302

3-30-30 *Senecio lucida* Cant (See 3-4-30) Fl & young fr. Bendinat-Portals path. As desc 3-4-30 except that style shows no sign of articulation, we found subtending spines (very young or old enough to be stiff) on branches bearing no fls. The habit of growth seems to be that a new shoot puts out spines each subtended by a fl. later from the out (down) side ^{bet. the spine & remains of stipule of outfl.} of some of the spines, & grows a ^{new} branch (which may or may not bear fls) & in this case we find the 3-leaf. arrangement desc fr fl-branches 3-4-30, these 3 lvs seem without the stipules of those which subtend the spines. The one fr. studied had only one ovule (out of several) developing.

3-30-30 *Helianthemum glutinosum* Pers. Nut 205 = *Fumana visida* Spach Bar 57, Bon 36 Fl. Near junction of path from Bendinat & highway west of Portals (on path). Cf with the 2 following, This is only from Bar. & surely right. But note: lvs sometimes alt but usually opp., linear 4 mm ^{long} with revolute margins but too broad to be "actaeo"

filiformes", at least 2x as broad as lvs of *H. laevipes* Spach. Stipules 3-4 mm long & like lvs except narrower, no revolute margins, & brittle tipped. Whole effect looking sometimes like whole of *H. b.* Fls. small
See 4-10-30 & 11-6-30 (N.B. later Cote I/57 "lower lvs opp")

8-20-30 *Helianthemum laevipes* Pers - *Fumana*
Spach. Fl. Bet. Cas. Catala & Portals via Bendinat
(See 3-4-30) Lvs glaucous & very like *Pine* need-
les 4-5 mm, the similar stipules 3 mm. Lvs
all alt.

8-30-30 *Helianthemum Fumana* Mill = *Fumana*
Spachii path up hill from Cas Catala.

8-30-30 *Cistus monspeliensis* L. (See 2-14-30) Fl. Bendinat-Portals.

8-30-30 *Cistus salvifolius* L (See 3-4-30) Fl 2 in diam
Bendinat-Portals.

4-3-30 *Aphrys speculum* L. (See 8-30-30) Fl. Bellver
common to west of foot path to castle.

4-8-30 *Aphrys bombyliflora* Link (See 3-30-30) Fl. Bellver
with above but only a few spec. seen.

4-3-30 *Aphrys fusca* Link (See 2-6, 2-24 & 3-30-30) Still
found but spec. less well developed than 2-24-30)

4-3-30 *Ononis reclinata* L. Knott 69, Bar 109, Bon 72
Bon H. 110 ill. Fl. Bellver with above, 4 in high. Fl. $\frac{3}{8}$ + in
Calyx cut almost to base, the seg. 3-toothed at apex &
as long as standard. Standard white & very
pale pink, delicately veined in lighter & darker
pink, wings white. very pubescent, ovules
about 16 in 2 rows. Floral br. 3-foliate & exactly
like others (Bar. says 1-foliate, Bon & B. & H. ill 3-foliate)
Fls look solitary not in raceme. (See 4-14-30

4-3-30 *Billbergia nutans* Wendl. B. M. & C. P. 146
Fl. grown in pots at Mr. Short's English Tea House. Lvs
to 24 x $\frac{5}{8}$ in, green & shining above, scarfy in
lines on back, firm, arching, very acuminate.

Scape 15 in to base of inf., clothed with sheathing
bracts from base; the lower ones greenish, long
 acuminate, passing into bright red, shorter, point-
ed ones at top. Fls. sessile on zig-zag rachis,
 subtended by very small ovate bract sometimes
 slightly toothed. Ovary ridged on outside. Outer
 seg. of corolla dull, greenish rose tipped blue. Inner
 seg. striking bright green edged deep blue, curving
 back. Fl. pendulous so that gen. effect is
 somewhat like fuchsia.

4-3-20 *Hippocrepis ciliata* Willd (See 3-29-20) Fl
 & young fr. Bellver. Plant $3\frac{1}{2}$ in, peduncles 2-3 flt.
 Young fr shows char. of genus plainly.

4-3-20 ? *Festuca*

Grass Fl. Bellver. 9 in high. Prob annual. St very
 slender. Lvs exceedingly narrow, involute, blades
 3-4 in long, the uppermost slightly overtopping
 inf. Ligulis short & obliquely truncate. Infl 3 in, 1-
 sided, open, raceme the spikelets mostly on
 thickish pedicels less than 1 mm long but at
 base spikelets in 2's consisting of one short
 pedicelled like those above & a second with ped-
 icel 3-4 mm. 1st glume very small (about $\frac{1}{3}$ mm

4-3-30

$\frac{1}{3}$ mm). 2nd glume very narrow acute 3 mm.
1st lemma 3 or 4 mm tapering into rough awn
of 9 or 10 mm { ^{stationary on} a little loose hairy on back not
ciliate on edges, subtending a long narrow ^{5 mm}
palea ^{opening to tip} enclosing a long narrow grain with ^{3 mm}
evidences of 1 stamen. 2nd lemma similar
but with longer awn (16 mm overall) ^{longer hairs on back &} edges
conspicuously ciliate. Stamen 1, ovary still
young & small, stigma & long, delicate feathery.
3rd lemma acc. to 2nd especially in ciliate
margins but palea smaller & no floral
parts; 4th, 5th & perhaps more lemmas acc. to
3rd but lacking palea & narrower.

This is prob. a *Festuca* of the group sometimes called
Vulpia. See *F. fasciculata* Forst. Kn I 320 =
F. membranacea Druce BVH 554 (not in Bon.)
for glume-like spec. See *F. Myuros* L. desc.
Bon. 365 with "stamen 1". See also *F. ciliata*,
Pers Kn I 332 not desc. BVH or Bon altho Kn
says it is found in Great Britain & France.
Pers 2nd floret is sometimes sterile bearing only
the 1 stamen (Found again Bellver 4-10-30)

4-3-30? *Catapodium loliaceum* Link Kn I 313
= *Scleropoa loliacea* Kodr. & Bar 504, Bon 364
= *Poa* — *Huda* BVH 559 = *Desmosoria* —

Nym. Fl. Bellver near above west of foot path
to chapel. 3 in high. Lvs $1\frac{1}{2}$ mm wide, flat, glab-
rous. Inlvs stiff but only 1 mm diam (Bon
says 2 mm) bearing 8-10 almost sessile
stiff spikellets alt (the sides of rachis being
somewhat curved to accommodate them) but
all turned somewhat to face one way.
Spikellets narrowly ovate, 7 mm long. 7-8 flr.
Glumes much shorter than spikellet, not
equal, both 3-nerved, the lower narrow, both
pointed & white on edges, the lower strongly-
keeled, the upper less so. Lemmas almost
4 mm long, rounded below, beaked & pointed
above at top, stiff & rather hard, 3 nerved,
white on edges, light green on back, the
lateral nerves & upper part of mid-nerve
dark green, mid nerve obscure below middle.
Plea reaches almost to tip of lemma, white
beaked with dark green nerve near each
edge, the beak ciliate. Grain oblong with
appendage at top. Stamens prob 3. (See 1-3-31)

4-4-30 *Arum italicum* Mill Kn I 354. Bar
 469, Bon 317, BMJ C.P. 134. Fl. Along stream that flows
 towards Establiments from west. Spathe very
 pale green (looks ^{almost} white when growing) $8\frac{1}{2}$ in long ^{pointed}
 upright on st. shorter than sheath of uppermost
 lf. so that top of spathe is lower than top of petiole.
 ♀ fls at base of spadix if stigma is present it
 is sessile & somewhat depressed in top of ovary.
 which is light yellowish, immediately above
 these & of deep yellow a few protuberances en-
 ding in long filiform appendage, then ^{after} a short
 interruption the ♂ fls. deep yellow, closely
 packed but each stamen distinct, then
 an interruption at least 2x as long as one below
 & above it a band staminal with long fili-
 form appendages like those below but bases
 dif. (less round & nubby) & seeming to bear
 pollen. Cf with following. Tube of spathe ^{swollen}
 over fl. portion of spadix. Cf with *Arum vulgare*
 var. *foliosum*.

4-4-30 *Zantedeschia aethiopica* Spreng. BMJ C.P. 138
 Fl. Garden Infanta S.

4-4-30 *Bartisia Truxago* L. Kn II 395 = *Truxago apuleia*
 Stev. Bar 347, Bon 238 Fl. Fields Laet just N of
 Pungu point - Establiments. Fl. upper lvs very

lower lip white ~~no~~ yellow so this may
be *fama versicolor* (Kn). Anthers rose
pubescent. Lower lip 3-lobed, the lateral lobes
about 2x as broad as the middle lobe. 2 pro-
nounced ridges ~~to the~~ end in sinuses,
not like the much smaller protuberances
of *Bartisia latifolia* (3-36-30).

4-4-30 *Stachys hirta* L. Kn II 340, Bar 366 Bon 253.
Fl. Bridge crossing stream west of Etablissements
on road from Puigpuent where along stream.
Corolla with upper lip white, oblong, broadly
notched at apex, erect with lip turning back-
ward. A few purple dots on edge of corolla at
base. The lower lip pale yellow with purple dots at
base, in appearance broadly obovate, hardly
notched at apex but the 2 sides at base are rolled
under & part constitute the lateral lobes (altho when
straightened out are not definite lobes) (see Bon
367 otherwise as desc (Bar & Bon). Note especially
anthers placed end to end & stamens curling
finally out side corolla.

4-4-30 *Lathyrus Aphaca* L. Kn II 123, Bar 144 Bon 87
Bon 130 Fl & young fr. Before reaching bridge.

4-4-30

bridge. Fl. pale yellow, standard, hardly veined,
2x as long as wings which are circular, beel wings
below tip. Style flattened dorsally, stigmatic
on upper surface & beel (rather than channel-
ed on under surface. Peduncle articulated near tip.
(See 4-14-30)

4-4-30 *Geranium dissectum* L. Kn II 127 Bar 81
Bon 57 B & H 96 ill. Fl. West of bridge. Flr. bright, rich
purple. (See 4-20-30)

M. scutellata L Kn II 70

4-4-30 *Medicago scutellata* All. ~~Kn II 70~~ Bar 115-
Bon 74. Fl & young fr. Last part of walk. St. ^(low to go) squarish
purple on angles. Plant recog. by all parts gland-
pubescent even young fr. fls. darker yellow than
usual.

4-4-30 *Cydonia oblonga* Mill B.M.C.P. 376 = *C. vulgaris*
Pers. Bar 167, Bon 102 Fl. Garden near E. at abutments.
Fl. pale bright pink 2 in diam. Lvs oval-ovate entire
tomentose both sides, entire; stipules oval, $\frac{1}{3}$ in
long! longer than petioles, serrate, calyx lobes
 $\frac{3}{8}$ in long, lanceolate, obtuse, serrate, reflexed.
Twig closely leafy to the tip which terminates in fl.

4-4-30 *Crataegus Oxycantha* L. forma
brevispina Kze II 48 = *C. brevispina* Kze Bar 166
(See fr C. O. — Bon 102, BVH 158 B.M.J.C.P. 376. Fl
Banks of stream where road 1st meets it coming
from west. Style 1 in all fls (20-30) observed. Fl
 $\frac{5}{8}$ in ($1\frac{1}{2}$ in) across. (See fr 11-5-30)

4-4-30 *Anchusa italica* Retz Kze II 303, = *A.* —
L. Bar 320, Bon 231 = *A. azurea* Mill B.M.J.C.P. 633
Fl. Field no. side of road just after crossing
last divide. Fl. $\frac{3}{4}$ in wide, a clear dark blue.
Bracts lanceolate, often broadish at base & somewhat
oblique, scattered on infl at but often not
subtending fl. & not one for each fl. (See 4-20-30)

4-4-30[?] *Orchis intacta* Link Kze I 398, Box 310, =
Aceras densiflora Briss. Bar 456 = *Nabeneria intacta*
Benth BVH 462. ill. Fl. So side of rd after crossing
3rd divide & before reaching side of stream. Several
spec. seen along this stretch. St 5-7 in high. Lvs
in some cases slightly, in one very markedly
spotted purple (if these spots had not been men-
tioned in description I should have thought it was
caused by disease). Fls in dense cylindrical
spike 1- $\frac{1}{2}$ in, somewhat twisted & one-sided
in appearance & suggestive of general look

4-4-30

look of *Spiranthes* at home. Sepals $3-3\frac{1}{2}$ mm long
upright adnaring in hood black stain & the
2 very narrow ^{somewhat pleated} petals. Lip $2\frac{1}{2}-3$ mm, deeply div-
ided into 3 lobes; the 2 lateral linear, wide spread-
ing; the middle lobe wider & broadening slight-
ly at apex which is dentate with 3 shallow but
definite teeth, the lateral one blunt & divergent
the middle one narrow. Obtuse spur (or sac)
at base of lip 1 mm (measured from behind.)
~~Fl.~~ Fl. greenish white (no trace of pink). Very
somewhat twisted, the acute pale (slightly
pinkish) bract about $\frac{1}{2}$ as long. Intine formation
very diff. to see in present state of fl. but pollen
sacs seem to have very slender caudicles, not
easily detached, the granular pollen is out of
anther cells. Can't see whether there is one or 2
glands or 1 or 2 pouches. (See 4-10-30; 4-20-30)

4-4-30 *Calycotome spinosa* Link (See 3-19-30) Fl
& remains of old fr. So side of rd immmed. after lunch
& fr some distance, just coming into fl, the tips
of calyx conspicuous on many buds. Bract un-
der fl has long middle lobe & 3 small lateral ones.

4-4-30 *Euphorbia umbellata* Poir. Kn II 158, Bar
417 Bon 281. Fl. At foot of stream. Glaucesc. The
2 lateral nerves fls obscure. To 33 in high. Lvs
spreading.

4-4-30 *Euphorbia*

Fl. with above & at first glance looks the same
with only umbell. But glands hair 2 long
articulate points with no "petites boules" as in above.
Other diff are. St. branching with 20 fks very erect
short branches each bearing beginnings of umbels
at top. Lvs. oblong $1 \times \frac{3}{16}$ in (i.e. shorter & broader
than above), finely denticulate toward apex,
base sharply acute & appressed upward.
Bracts cordate at base.

7-4-30 *Fraxinus*

prob *F. ex celsior* L var *australis* Ray Bar 307
(only poss in Bar. No *F.* given in Kn) ^{except as cult.} (See also for
F. ex celsior L Bon 211, B & H 308, B.M.G.C.P. 598. Unifae
fr $1\frac{1}{2}$ in. By stream with *Crataegus*. But note
diff from disc. On the 13 in branch collected, lvs
in all case 5-lfts. v lvs and branchlets always
in 3's. Samaras acute or obliquely obtuse
(rounded on one side of apex and narrower & acute
on other) never truncate and notched

7-4-30

notched. And fl. season earlier than May in Mallorca, as desc.
lvs. are sharply almost to base; no calyx on fr.

4-4-30 *Medicago lupulina* L. Knott 69, Bas 114, Bon 94
B&H. III. Fl v very young fr. Luncheon place. St trailing
to 15 in. Lf lvs short petioled $\frac{1}{6}$ - $\frac{1}{4}$ in. Peduncles very
slender 2-2 $\frac{3}{4}$ in with compact heads of many fls.
Young fr gland-pubescent, v with style making
a loop but almost complete turn of screw. Anthers.

4-4-30 *Viola arborescens* L. (See 3-26-30) Fl. in rock wall
so side of rd just east of luncheon place. Upper 4 petals
shaded lilac whitish at base, the lower petal
veined purple on lilac ground, greenish toward
base. Lateral petals very slightly bearded. St $1\frac{1}{2}$ in
high from very woody base (see 11-6-30)

4-4-30[?] *Melica minima* L forma vulgaris Kn I 317 =
M. major Sibth Bas 502, Bon 364 Fl. By stream either
with *Crataegus* or at ford. 2 ft high. Lower lf blades
short 1-1 $\frac{1}{2}$ in. increasing until uppermost is
8 $\frac{1}{2}$ x $\frac{1}{4}$ in. Sheath longer than internodes. Sheath, blades
both sides somewhat rough, edges definitely rough.
Ligule membranaceous, 3 mm in front, 2 mm behind

lacerate but not ^{definitely} "bipartida y las lacinias tri-
angulares" (Bar) or "avec 2 pointes sur les cotés" Bon.
St. infl rough & pedicels pubescent under a pube-
let. Spikelet 8 mm long. Glumes broad 5-nerved,
acute, the 2nd as long as spikelet, the 1st somewhat
shorter, both purple-brown on back with white mar-
gins. Lemma with 7 nerves showing plainly
on back & minutely hispid. Palea broad, 2-
keeled near edges & pubescent on edges, bi-
dentate. Fertile fls 2, with 2 more sterile glumes
broadened & truncate at top above. (See BVH
562 for genus) If not this then prop *M. minutat*
which prob = *M. ramosa* Vill Bon 364 (See 4-10-30

4-4-30 ? *Carex glauca* Murr Kunz 347, Bon 335 =
C. - Scop ^{Bar} 480 (var. *genuina* Ledeb) = *C. flacca*,
Schreb. BVH 519. (ill not much like spec) Fl. So-w cor
of bridge on way to Establiniento. Seems only poss-
ibility. Roots stock creeping with overlapping brown
scales veined like lvs. St 6 in high. Lvs glaucous ^{rough on edges}.
Upper 3 spikes ♂, scales purple-brown with yellow or
greenish midrib. 5 mm x 1 1/2 mm, edges narrowly
scarious. Lower 1 spike ♀, bracts oval alate, the
purple-brown edges & green band down center
about equal in width. Stigmas 3. Perigonium at
this stage looks lenticular, glabrous except for a
few minute hairs on edges pale green

4-4-30

green, with ring of yellow at entire leafless apex.
(See 4-10-30)

4-4-30[?] *Filago germanica* L var *apathula* DC.
(See 3-14-30) Fl. Som after leaving car above look out.
Or poss *F. germanica* L. Fl heads often 6 or more more
than 11 in each cluster. Char fls not def. enough to
decide bet. these 2 poss.

4-4-30 *Morus*

prob *M. alba* L. Bar 421, B.M. & C.P. 234 as young lvs are
shining above and practically glabrous. Only 1 bud
found. Farm where we had lunch, row of trees to so of
buildings.

4-4-30 *Bunium Bulbocastanum* L. (See 4-10-30)
Bud. Field soon after leaving car.

4-4-30 *Psoralea bituminosa* L (See 3-19-30) Fl. west of
bridge west of Establinents. Bracts at base of fl head
make it look involucreate. Calyx & ovary thickly
covered with stiff hairs.

(A) 4-4-30 *Gladiolus segetum* Ker Kn I 396, Bar 448
 Bon 305, vacant lot west of cloth factory Establi-
 ments so. side of road. Studied 4-13-30 & fl with
 (B) *Gladiolus illyricus* Koch Col. Bellver 4-10-30.
 Ident. chiefly by ovules (A) having no indication
 of wings v (B) with very evident indications of
 wings. In add. (A) has anthers 16 mm on filaments
 14 mm. (A) has delicate plant than (B), lvs 10-19 mm
 wide, at 3+ mm diam, & considerably zig-zagged in infl
 so that the 2 rows of fls tho' turned to same side form
 2 definite rows with a space between. Fls larger than
 (B) to 2 in overall, & not so deeply colored (Bee says
 "rosadas") tho' this may be partly due to having open-
 ed in the house. Spathe valve proportionately longer than
 (B) tho' none reach tip of fl. Shape of perianth seg
 much the same in A & B; perhaps upper lateral
 seg are proportionately narrower in B.

~~203 RBK~~ 203 RBK

4-4-30

20 fl or fr. Herb 8 in high suggests *Senecio* L. f.
 fragrant. Found of stream west of Establiments
 (see *Delillea Ageratum* L. Bar 249 10-26-30.

4-6-30 Mesembryanthemum edule L. B.M. C.P. 259
Fl. Cult. Bellver. Fl. very pale yellow, 3 in diam. But
stigmas & cells 10 or 12. Calyx of 2 large & 3 smaller
lobes shaped like the lvs., the smaller ones bearing
fleshy remains of what was evidently covering
on corolla in bud. Lvs. dull dark green. Peduncle
bears in middle $1\frac{1}{4}$ in above base & $1\frac{1}{2}$ in below
base of fl. 2 opp. lvs. similar to others. Perhaps these
are to be considered bracts

4-7-30 Mesembryanthemum
Fl. Cult. Infanta. Plant looks like smaller,
softer edition of above. Lvs. opp. & connate, more
yellowish green than above, to $1\frac{1}{2}$ in, 3 lvs. but less
sharply so, glabrous, smooth, no teeth on keel.
Fl. branch in axil of lf. bears 2 lvs. near base
in each of these axils a peduncle $\frac{3}{4}$ in long with
a pair of lvs. near base & rising bet. these lateral
peduncles, another 1 in long. Calyx like that of M.
edule but smaller & softer like lvs. Fl. bright purplish
(magenta) a little deeper than M. cordifolium (see
3-10-30), Stigmas 5, waxy 5-celled.

4-10-30 *Trifolium scabrum* L. Kn II 82, Bar 124
 Bon 79, BVH 117 ill. Fl. Bellver s-w gate, St 3-5 in.
 upright with spreading hairs not "apiliguas"
 or "echados". Lfts long hairy esp. below
not "denticuladas" or "coriaceous". Small fl.
 heads sessile in axils of upper lvs. Calyx
 with white hairs rather appressed, lobes
 unequal: ^{anterior} ~~posterior~~ lobe longest, lateral lobes
 shorter & ^{posterior} ~~anterior~~ lobes still shorter. Pet.
^{posterior} ~~anterior~~ lobes & lateral lobes definite "callos-
 idad" in throat & outside at base of tube
 the hairs more thickly placed. Fls whitish
 slightly longer than calyx. Veins in lvs
 curved outward at tips (See 4-18-30)

could this have been *T. lomentosum* see 4-18-30

4-10-30 *Trifolium resupinatum* L. Kn II 83 Bar
 127 Bon 78 BVH 118 ill. Fl. v fr. Bellver path eastward
 from gate. St. not creeping & rooting at nodes as
T. fragiferum (BVH), & peduncles $\frac{3}{8}$ - $\frac{1}{2}$ in shorter
 than ^{pedicels} ~~pedicels~~ (see ill BVH). Involucres under
 heads a membranaceous disk no longer than the
 very short pedicels (Bar & Bon). Inflated calyx
 broader at base than tip (Bon) & 2 teeth of upper
 lip "divergentes" not "incluadas hacia abajo"
 Corollas rosy & seem turned sideways in
 calyx. Fruiting head round & fuzzy much
 like ill ● *T. frag.* ● *iferum* ● Bon.

7-10-30

Bor. One spec. only found.

4-10-30. *Trifolium agrarium* L Kunt 85, Bar 127 =

T. Compestre Bor 77, BVH. 117. Fl. in all stages. Bellver
near "wooden gate". St. ^{v peduncles} pubescent with appressed
white hairs. Stipules ciliate. Calyx pubescent in
bud (see ill (BVH)) tho' at least sometimes glabrous
later. Peduncles $\frac{3}{8}$ in or less, ~~shorter than~~. Nerves
of standard end in teeth towards base of blade.
[Of 8-12-31 see underlining R & H indicates, middle lfts were
longer stalked than others this is SVH I 405 *T. procumbens*
L = *T. compestre* Schreb. See also 4509]

304

4-10-30 *Trigonella*

Fl. v. unisexual. Bellver S. gate with *Trifolium*
scabrum. See Bor 67476, BVH HBV BM G.C.P. 405.

St. in Bor. ⁹⁶ *T. monophelica* L or *T. polycerata* L.
3-4 in high, simple v upright or 2 branched from
base, puberulent. Lvs 3-foliate, the terminal lft
3-4 mm above the lateral ones. Lfts obovate to 8x6 mm
pubescent both sides, obtuse at apex, more or less
curvate at base, dentate above middle. Fls 5-6
4 mm long in closely sessile heads in axils of lvs.
Calyx pubescent, divided $\frac{1}{2}$ its length into 5 equal
narrowly lanceolate teeth. Corolla clear yellow,
deciduous; standard distinctly longer than
wings v very obtuse beel. Stamens shades of yellow.
Fr. (at this stage) sickle shaped curving upward.

.6 mm from tip to tip, 2 mm wide, pubescent, transversely wrinkled with fibrous veins which are very distinct from inside. Ovules (only 1 pod studied) 7 of which 4 are developing. Pod looks like ill. *T. corniculata* Bon 76, except that curve is rather nearer stem end, and more like *T. monapeliaca* than *T. polycarpa*. (Not sure what Bon means in dimensions of fr.)

4-10-35 ¹Plantago Bellardi All Kn #412, (see extend)
Fl & young fr. with above. 1-3 in high. Lvs all basal, very narrowly oblanceolate, the largest $1\frac{5}{8} \times \frac{1}{8}$ in but often shorter & sometimes almost linear $\frac{1}{16}$ in. wide, acute at apex ^{long} tapered to narrow base. Hairy with long, white spreading hairs, not velvety or woolly. Rather rough to touch above. Peduncle surpassing lvs., pinnate (perhaps larger at top than at base, not at all striate, thickly pubescent with ^{short} spreading white hairs among which are others 2-4 times as long. Heads from $\frac{3}{16}$ in high, 2 fld on tiny plants to $\frac{1}{2}$ in high or 12 fld on larger plants. Pubescent (looks gland. pub. but that may be caused by pollen) Bracts narrowly ovate, white margined at base. tapering into a longish, thick but blunt point. Outer sepals thick &     narrowly white.

X 2m P. Lagopus coll. 4-10-30 this appendage relatively much smaller.

4-10-30

white margined on front edge. Inner sepals ^{shorter} thin & white with green stripes down back. Petals extended white with golden brownish center.

Young fr with 1 ovule (roughened back & hollow faced) in each cell. Style pubescent. Empty anther 1 mm long with a thin white waxy like appendage at tip $\frac{2}{3}$ mm long. (If all P. have this appendage I have not noticed it before). Lvs entire, flat, stiffish & upright (no tendency to lie flat on ground) Mid nerve not very distinct & larger ones (at least) seem to have 2 very obscure lateral ones.

Bon 259. ~~Bae~~ P. Ballardii All var leptocephalae Kell. Bae 331
This seems only possible ident. in Bae. but lacking in corroborative detail and "poil" not "roux".

4-10-30 Sideritis romana L. Knott 332, Bae 369
Bon 254. Fl. Bellver. Path east from gate. Calyx with ring of long hairs in throat. Filaments very short, deep in corolla tube, the shorter pair with tuft of hairs at base. ^{Pollen sacs} ~~anthers~~ seem one on the other instead of side by side as usual. Longer filaments ciliate on edges (perhaps "tuft of hairs" on shorter ones is really ciliation) & anthers of longer filaments one celled, the upper pollen sac incomplete. Longer stamens anterior (Note Sideritis thought found in Bermuda 1927 was not this)

4-10-30 *Limodorum abortivum* L. Kn I 414, Bas. 463,
Bon. 309 Bud Bellver near S-E cor. v on ravine
to northward.

4-10-30 *Orechis coriophora* L Kn I 399 Bon. 310, Bas.
457 (prob var *polliniana* Rehb) Fl. Bellver
Path eastward from gate (where there were many
not yet opened) also path by meat walk. Lip
pendulous is 3-lobed at apex, the middle lobe
narrow v pointed (Bon) not "bifido", the
lateral lobes broader v shallowly serrated toothed.
Fl dark gray-red, lighter with red spots at
base of lip. Ovar not unpleasant

205 RBK

4-10-30 *Orechis intacta* Link (See 4-4-30) Bellver
Ravine on east side, only apex seen. Lvs, stem, ovaries
v perianths liberally spotted purple. Spikes more
densely fld than 4-4-30. Fl like 4-4-30 except that
spots give it pinkish look, sepals 5 mm long, lips
3 mm v middle lobe of lip not def. 3-toothed at apex.
tho not quite uniformly & opened

4-10-30

tapered to point. (See 4-20-30)

4-10-30 *Ophrys fuciflora*, Reichb (See 2-20-30) Fl. fading
Bellver. Same on east side Fl. colored like spec 2-27-30
[Doubtless was *O. tenthredinifera* Willd. See 3-6, 8, 12-32]

A 206

4-10-30 *Serapias linguat.*

Bellver. Fl. Same as 2-20, 3-14, 3-29-30. Fl almost at

rt L with ovary & lip hanging at obtuse L with
fl. so diverging outward from line to ovary

R. Bract reaching above ovary but not nearly
as high as fl. would be if it stood upright.

Lip 14-16 mm wide ^{at base} 8-9 mm wide in central lobe.

(One case 11 mm wide central lobe but base not
measured as wished to preserve plant.)

Base of
lip with elevated spot* which at its base bears
2 flange-like teeth. Appendix to column 3 mm.

[*spot elongated, dark red & shining, shallowly grooved down
center & shallowly 2-lobed at front]

382

B 207

= *S. occultata* Hay Bes 453, Box 309 Cat III

4-10-30 *Serapias parviflora* Parl Kn I 410

Bellver just coming into fl. Plant same
in general appearance except upper lf
in some cases reaches to or beyond base of
infl. Infl somewhat bent over (in A up-
right) and lower lf sheaths conspicuously

spotted purple. Very slight traces of purple spots on A. Fl much more nearly in line with ovary than A. & lip hanging almost appressed against fl or at least to ovary.

the bract much longer than ovary & in some cases reaching to tip of the sepal. Lip 9 mm widest part & 4 mm. wide middle lobe. Lip has no elevated spot at base but 2 flange-like teeth. Appendix to column 4 mm. Fl looks very much smaller than A. Color about the same but lip russet in all cases seen. [quite unlike "spot" in A.]

308

4-10-30 *Allium subulicentum* L. Kn I 370, Bar 438, Bar 298. Fl. Bellver no-w. wall. Lvs 7-13 mm broad, ciliate to apex. Antlers reddish ^{even} in bud Fl. about 15. Seg. white with very obscure greenish line down back. Peduncles round & very shiny. Lvs dull above, shiny beneath. Bulb ovate 9 mm diam, the lateral bulblets (Bar) usually absent. Filaments not as long as sepals.

4-10-30 *Allium*

Bud. Bellver path east from gate. Bulb ^{brown} scaly & covered with bulblets attached by slender stem which ends at base of a flattened surface near top of bulb. • Lt. This • surface • being yellow

4-10-30

plane of contact bet. bulblets & bulb. (Noted diff from *A. roseum* where bulblets are attached by stipitate base) St. leafy almost to bud (4 lvs not counting 1 or more without ones below) St. reddish at base. Lvs glaucous flat 7-9 mm at base stiff peak, serrated glabrous, ligule short, tough, white, entire. This rules out *A. paniculatum* L var *pollens* Kuhn & *A. nigrum* L. & *A. vineale* L. Buds too young to show clear spathe at this stage with long green tips. Perhaps *A. rotundum* L var *ampeloperasum* Kun I 368, = *A. ampeloperasum* L Bas 437. Bon 397.

4-10-30

(A) *Allium roseum* L. (See 3-30-30) Fl. Bellver. Lvs not more than 5 mm wide. (B) Buds (part of this) which opened in lower leaf petals white & stamens projecting. Lvs. minutely roughened on edges (at least below)

4-10-30 *Thesium humile* Vahl Kun I 435; Bas 586

Fl & unripe fr. Bellver. n. or w. wall. (See Bon 396 & Bon 402 for desc. of genus & of *T. humifusum* DC & *T. divaricatum* Jan into fls peduncled) Fls. almost sessile. Lvs seem entire but bracts (the longer one easily mistaken for lf esp in lower fls) clearly "dentado-asperae". No there are upper lvs subtending very short branches which are also "dentado-asperae". 2 lateral bracts about 1-2 times as long as fr; the 3rd bracts long ped to 9 times as long as fr.

4-10-30 *Linum*

Early bud Bellover path east from gate. Impossible to determine whether *L. gallicum* L. Kn II 134 Bas 73 or *L. strictum*, Kn II 135, Bas 74. Petals yellow. Lvs 1-nerved (an occasional upper one 3-nerved) & pedicels in axils of lvs. Main st. upright with several much shorter st. from near base. Main st also branching near top but these branches show no sign of being "pubescentes per elados internos". Lower lvs about $\frac{1}{4}$ in long, upper lvs almost 1 in long. Lvs distinctly rough on margins & on both sides. Sepals unequal, rough like lvs & with stalked glands towards base. (See 11-27-30)

4-10-30 ? *Campanula trachelium* L. Kn II 442, Bas 297, Bas 200. Early bud Bellover. 9 delicate upright branches from base, grayish green & hairy in all parts. Lvs all alt., obovate with coarse rounded teeth, rounded at apex, narrowed to sessile base. St. angled. In upper axils a slender st $\frac{3}{8}$ in long with at its top 2 small 3-lobed lf-like bracts & an almost sessile bud and what is evidently a bud of a similar stem. The most advanced buds at this time are opp the uppermost lf which bears in its axil a stem like

4-10-30

like those just dec. This fl. (opp to parent lf) has pedicel 1 mm long. Plant strongly suggests ill Bon v fl. (except that corolla is not expanded) just like ill Bon. Calyx almost glabrous inside except ring of hairs at base of corolla. Ovary not nearly long enough to be *Specularia* (See ill Bon v BVH #625) (See 11-30-30)

4-10-30 *Anthyllis tetraphylla* L. (See 3-29-30) Bellver Fl. v fr. (unripe but ~~fruit~~ calyx much inflated) St. spreading to 6 in (prostrate) Asides 3-29 except that bract under fl. head seems always of 1 lft. Stamens diadelphous even in fl.

4-10-30 *Antirrhinum leontium* L. (See 2-4-30) Unripe fr. Bellver. Seeds deeply hollowed on one side, smooth & rounded on other with projecting rim

4-10-30 *Antirrhinum majus* L. Unripe fr. about same stage as ~~the~~ above. Cult. Infanta S. Seeds very rough with depressions & thin edges & points bet

4-10-30 *Sisymbrium officinale* Scop. Kn II 19, See 33 Bon 24, BVH 35. Fl. v very young fr. Bellver path

eastward from gate. Cfd with *S. corymboides*, Reg
Bellver & *S. Iris* L. roadside. Haus on st short, mostly
downward pointing & too rough to be called "villous".
(See 12-5-30. G 429)

4-10-30? ~~*Daucus platycarpus* Scop. K. # 356 = *Chelidonium*~~
~~Koch Bot. ¹⁴² Fl. Bellver. n. or w. wall. = *Caucalis*~~

Bon + 54. Using key in Bon this is either *Daucus*
or *Caucalis*. Fr too young to be much help. Brct
invol. funnel 4-6 often simple & linear but in
best developed heads 3-parted below middle into
narrow linear seg. & not as large as umbel.

If *D. pub.* *D. Carota* L. subsp *gingidium* K. # 354
= Bon *D. gingidium* L 124 (See Bar 191-2) Lvs much
like ill Bon. Bracts narrowly white margined
& ciliate on lower part. Bracts involucre, sim-
ilar to simple ones of involucre. Receptacle funnel
rounded, no sessile central fl. No *Caucalis* fits
as well. Rays to 18 (sometimes bearing only one fl.)
and outside fls no larger than others as
not *C. platycarpus* L. Lf not as *C. latifolia* L
(See also ill Bon # 401), Invol. too well developed
for *C. daucoides* L or *C. leptophylla* L. & plant not
relativly as *C. maritima* Bonan. Fr purplish;
rays curve upward after flowering.

4-10-30 *Torilis nodosa*, Gaertn (See 2-17-30)
Fl. Bellver

4-10-30 *Bunium Bulbocastanum* L. Kn II 286 =
Bulbocastanum mauritanicum -
~~*mauritanicum*~~ Willd Bas 208 =
Carum *Bulbocastanum* Koch Bon 133, BON 191 ill.
Fl. Bellver path eastward from gate. Stems smooth &
round, looks very bare with its few lvs of long
linear seg (usually ~~3~~ ~~partial~~ but 3 seg, sometimes
more & sometimes only one (Bas says always 3 or
more.) (See 4-4-30)

4-16-30

Bellver path bet "wooden gate" & S-W gate. Only 2 plants
seen. Lvs appearing at surface of ground as in
lily or orchid families. 1 l. only collected. Sessile,
oval, with many parallel veins $5\frac{3}{4} \times 2\frac{3}{4}$ in
entire, so highly glossy on both sides as to look
artificial. Could these be *Securidaca* or *petraea*.
noted 1-4-31 as very early

4-10-30 *Helianthemum glutinosum* Pers (See 3-30-30)
Fl. Bellver. Note that while upper lvs bear the
long stipules like 3-30, the lower ones on twigs are
much shorter 1 mm & often cloth twig after lvs
have fallen. Parts all pubescent & becoming marked
by glandular toward top. (See 11-6-30)

4-10-30 "*Poa cistacea* J 2-14 & 3-17-30. Fl.
Bellver. of w. above and is prob a var. Perhaps
Fumana viscida Spach var *thymifolia* A.
Code Bar 51. Lvs almost glabrous near glandular.
St toward top & calyx pubescent near glandular.
Stipules like the stipules of lower lvs of species.
Clothing base of twig in same way but more
noticeably. Lvs all opp.

4-10-30 *Helianthemum guttatum* Mill Kn II 200
Bon 36. = *Tuberaria variabilis* Willd var *Milleri* Willd Bar 48
Fr. Bellver. Plant $2\frac{1}{2}$ in high, very delicate. Remains
of 3 old lvs near base. Below middle 2 lvs opp, sessile
ex stipulate, oblong 11×3 mm, obtuse at apex, pubes.
cent both sides. Fls 4, calyx 5 mm long. The almost
ripe seeds, hollow on one side, rounded on the other
& speckled purple (See 2-2-31)

4-10-30 *Lagurus ovatus* L (See 3-20-30) Bellver.

4-10-30 *Poa bulbosa* L. Kn I 311 Bar 500, Bar 362 BVH
561 (ill little like spec) Fl. Bellver. St to 15 in high, swollen
& bulbous at base. very glaucous, striped green & white,
geniculate at nodes. Basal lvs reaching about
3 in from ground 2 mm or less wide

4-10-30

wide. St ~~lvs~~ with blades $\frac{1}{2}$ to $\frac{1}{4}$ in. - equal 4 mm long, white & laccate at top. Infl rather compact before fl.

but open at anthesis. Glumes white margined, lemmas broad-
white tipped & paleas white except for green beak.

Lemna more or less pubescent & with copious long hairs on mid ribs & lateral nerves. Infl $1\frac{1}{2}$ in long.

4-10-30 *Stipa capillata* L var *juncica* (See 3-17-30) Bellver.

4-10-30 *Amphelodesmos*²~~mauritanica~~ *mauritanica* Desv & Schum (See 3-26-30) Bellver.

4-10-30 *Melica minuta* L forma *vulgaris* (See 4-4-30) Bellver S-e corner.

4-10-30 *Carex glauca* Mur (See 4-4-30) Bellver S-e corner.

4-10-30 *Gladiolus illyricus* Koch Kut 897, Ber 448, Bon 305 Fl. Bellver. Cfd with *G. segetum* 4-4-30 which all; see also *G. illyricus* 3-26-30. Lvs 10 mm or less wide; St $1\frac{1}{2}$ mm diam. & hardly if at all zig-gaged in infl so that fls are more nearly in one row than in

G. segetum. Fls $1\frac{1}{2}$ in overall, deeply colored
(Bar says "purpureas") Spathe also varying in
length but certainly ^{proportionally} shorter than in *G. segetum*.
Anthers 10 mm on filaments 12 mm. But perianth
seg. not apiculate. Note distinction in Bon bet.

G. ellysiensis v *G. communis* seems contradicted by
(Bar) flowers show definite signs of being winged,
quite dif. from *G. segetum*. See 11-27-30

4-10-30 *Clitoria perfoliata* L. (See 3-14-30) Bellver but which
opened in house. fl had parts in 9's. Note stigma shaped
like horse shoe open end up.

4-10-30 *Allium subhirsutum* L. var. *subullosum* Bat
& Trab = *A. subvillosum* Salzm. Fl. Bellver (see
4-20-30)

~~209 RAR~~

4-10-30 *Eryngium Campocroceum*
no fl or fr. Bellver Ross. Umbellifer Lvs 1 or 2-pinn-
ate with rachis widely margined
(Ident by spec. collected Oct-Dec 1930)

310

4-14-30 *Lofus tetraphyllus* Murray (See 3-26-30) Fl
 Formentor Rd west side of divide. Generally as dense 3-26 but
 petiole 2 mm lft 5x4 mm. Lf usually 4, sometimes
 3 or 5 foliate (note Barcelo says 4 foliate & no stipules
 instead of 3 foliate & 1 stipule as thought 3-26), fl.
 solitary (in 1 case 2) on peduncles $\frac{3}{8}$ - $2\frac{1}{2}$ in long,
 peduncles hairy like st, in axils of upper lf - ped.
 terminal earlier. Lf subtending fl 1-3 foliate.
 Fl 10 mm base of calyx & lvs of standard, standard 10 mm
 broad erect, outside reddish brown mixed with
 yellow, inside yellow, veined red, larger than
 the equal wings & keel. Calyx reddish brown on nerves
 & intermediate spots.

311

4-14-30 *Astragalus Poterium* Vahl Kn II 105; Bar 134
 Fl. Formentor Rd near divide both sides frequent.
 See Ill Kn III. exactly like. Dense round cushions. 3 to
 perhaps 6 in high very spiny with persistent
 petioles which cloth the branching matted sts. to
 base. Lvs to almost 2 cm with 4-6 (or 7) per. lfts (Bar
 says 2-4). Spiny tips of rachis projecting. Lfts
 short petioled, not exactly opp. 3+ mm long,
 ovate-lanceolate, the sides folded somewhat forward,
acute (Bar says obtuse). Stipules adherent to pet-
 iole. All parts of lf with short white stiff appressed
 hairs basally mostly. Fl 15 mm overall.

Calyx

~~Calyx~~ Tubular 4 mm + teeth 1+ mm. Hairy
Hairy like lvs but hairs v teeth dark. Corolla white
with purple markings. Standard beaked, tapering
to point which is // to wings. Standard longer
than wings v wings longer than beak. Ovary
pubescent, 11 ovuled (in one case) [Barraza "Casi
monosperma". Fr. in 1-3 fl axillary raceme,
peduncle shorter than lf. each pedicel subtended
by narrow bract as long as pedicel, v each fl
with 2 shorter bracts at base. The more advanced
fr sug. that only 1 ovule develops.

4-14-30 *Stachys arvensis* L. Kn II 339, Bae 367, Bon-
253 BSH 368 ill. Fl. Fermentor Rd west side of divide.

Fl with 3. lvs L. 4-4-30 anthers placed the same way
- end to end - v lower stamens inclined to curl outward.

Calyx 6 mm long at anthesis, growing much wider
(not inflated) v at least somewhat longer later,
naked within, its equal teeth markedly cili-
ate v with short, soft spine. Corolla pinkish white
with purple spots, upper lip concave, pubescent
on back, broadly notched.

4-14-30 *Iris Sisyinchium* L. (See 3-29-30) Pollenosa
Puerto. Fl. which evidently withers in afternoon.
v bud. Root ● a cream ● which ● seems to grow

4-14-30

grow a new one on top of old each year like our cult
gladiolus. Stamens white

212

4-14-30 *Rhamnus* ⁱⁿ *Ludovici* Salvatoris Chocoma
171 = *R. balbanicus* Willd 3ae 99. Fl. Formentor Rd east
side of divide near top of loop above foot of cut off.
♂ fl. 4-5 parted. Tiny petals sometimes present. Lvs
gray-green above, yellowish but hardly rusty below.
cup-like persistent bracts of inf. pubescent but
not "glanduloso-denticulatae" Young twigs,
petioles & ^{conspicuous} underside of youngest lvs pubescent.
The densely fld ~~spang~~ branch has evil odor.

4-14-30? *Osiris alba* L. Kn ^I 434 = *Oxyris* — L. Ber
408, Don 276. ♂ fl. Pollensa east end of Roman bridge
3rd 3 ft & more high. St $\frac{1}{2}$ in thick. green with brown
stripes where bark has broken, very much branched.
Branches green & naked except for expanding
fls. Short young shoots from these branches bear
expanding lvs. Very few mature lvs on branch.
These are coriaceous, alt stipulate, entire, linear
lanceolate $\frac{15}{16}$ in long, acute sessile. Infl very short
raceme of about 4 fls of which the terminal (or 1st opening
one) is subtended by 2 bracts & the lower fls by 1 bract
each. Bracts coriaceous. Fls on 2 mm. pedicels

consist of saucer shaped perianths, with
3 obtuse lobes lined with a disk whose
3 obtuse points alt. with pendent lobes. Sta-
mens 3 opp. per. lobes attached to upper
edge of disk. Each stamen with tuft of hairs
behind at base of filament. No rudiments of
ovary. Fls yellow green, perianth thick See 10-33³⁰
and H-5-30

4-14-30 *Galium Aparine* L. Kn II 433, Bas 223, Bon
142, BvH 222 ill. Fl & young fr. Near above.

4-14-30 *Ranunculus* ^{*purpureus* L. Kn II 495 Bas 14 Bon 85}
~~*parviflorus* L. (See 3-30-30)~~ Fl
& advanced fr. Pollenosa shortly east of Roman bridge
Plant in, much more robust than 3-80 and
sepals & st. glabrous, receptacle has a few hairs
but shape of lvs & the capsule make any other
spec in Bas impossible cfd with *P. parviflorus* L.
4-20-30.

4-14-30 *Scrophularia peregrina* L. Kn II 369, Bas 335
Bon 231 Fl & advanced fr. Pollenosa shortly east of
washed out bridge. (See BvH for desc. of genus)

+14-30 *Albanna lutea* Morris(?) Kn II 304 = R.
—D.C. Bar 321, Bon 221 Fl v advanced fr. Formentor Rd
east side bet divide & tunnel. Much of fr very evident
"Callosidades" not prominent but distinguishable
Fl. 6 mm or less, the yellow corolla hardly longer
than gland-pubescent calyx. Plant has look &
feel of *Echinum*. Neither Kn nor Bar. record it from this
locus in island.

+14-30[?] *Pastinaca lucida* L. Kn II 348, = P. — ^{Bar 199.} Roman
to fl. fr. Formentor Rd east of divide toward base.
Lvs just arising from ground suggests of *Rubus*.
Dark green & very shiny above, lighter ~~very~~
rugose below the veins almost yellowish.
Lf oval (can't be made to lie flat) $5\frac{1}{2} \times 5\frac{1}{2}$ in
cordate 3 veined at base, the lateral veins ter-
minating in shallow rounded lobes, the
next 2 lateral veins terminating in less
distinct lobes. Entire edge of lf crenate. Lf
entirely glabrous, thick & leathery. Odor very strong
& penetrating, hardly disagreeable. See Kn II plate
XLI. which pictures my lf exactly except that in
mine the 2 lower lobes are connected with rest of lf al-
most to tips.

4-14-30 *Smilax aspera* L. (See 2-25-30-27-30)

- A. No flor fr. Short cut from Fermentor toward divide
Dense, stout thorny tufts 6-10 in high. No lvs.
B. Near by. Fr. reddish. 5 mm diam.
C. Near divide. Plant more as usually seen
but not climbing. Old st. unarm. More re-
cent fruit bearing growth well armed. Lvs un-
armed, mottled light green $1\frac{1}{2}$ in long $\times$ $\frac{3}{8}$ in at base
Fr. reddish, 5 mm or less diam.

213 RBK

4-14-30 *Salix*

- E. & very young fr. Pollensa - Fermentor path on
Fermentor Rd. Plant 6 in high, root stoutish, fl
much branching from base & these with short
1 in or less lateral branches almost at rt & lt to main
st. St. angled with downward pointed prickles on
angles. Lvs in 6's, lanceolate & curved, 7-9 mm
long, dark green & ~~shiny~~ almost shining above, gray
green below, small prickles on edges & mid-st
pointing upward. Lateral branches bear whorl
of lvs & then branch into (usually 3) peduncles
Peduncles usually 3 fl. with 1 or more small
lvs at tip. Fls very small, about $1\frac{1}{2}$ mm diam,
greenish with purplish tinged outside (not at
all white). All seem fertile, the ovaries either
smooth or pers. tuberculate.

214

4-14-30 *Epipactis microphylla* Swartz Kn I
413, Bar 589 Bon. 309. Bud Road shortly west of
Farmentor Hotel just across road from our luncheon
site. $9\frac{1}{2}$ in high, the upper $\frac{1}{3}$ drooping, st glabrous
& purplish at base, gray above with dense covering
of thick hairs (or scales) Lvs ovate or lanceolate
longest $1\frac{1}{4}$ in, all shorter than internodes. Effect is
bract-like except that they stand at L to st. Lower
lvs sheathing at base, upper ones sessile, all acute
glabrous. Fls in lax raceme, ^{longer} bracts at this stage
as long as fls. Ovary not twisted and like outside
of sepals & petals covered with the same scaly hairs
as st. Sepals & petals now green, more or less
keeled, free. Lip definitely Δ at apex, apically
narrowed ~~to~~ at middle with 2 "gibas deep-
as" which have no corresponding hollow on
underside. Anthers large & thick, free on
short filament, not operculate. Stigma
face with thick ruffled edge below & column
at sides & back of stigma has similar ruffled
projections supporting base of anther.
See Bot 454 for desc. of genus.

4-14-30? *Digitalis purpurea* L subsp. *dubia* Knucke
^{D. dubia Roper}
Kn II 888, Bar 346. See Bot 344 & B.M.C.P. 672 for
desc. of genus. Very early bud. Farmentor Rd east

of divide near base, tho' buds so young that
tube has hardly developed. Bar. detailed desc.
makes this ident. almost sure.

(see 4-20-30)

4-14-30?? *Galium Mullugo* L var *cinereum*
very early bud. Pollenosa-Fermentosa. 5 in high with
short branches starting above middle. St 4 l'd,
glabrous & shining. Lvs in whorls 6-7, 1 nerved
glabrous & shining above & below. Lower lvs narrow
oblanceolate 17 x 2 mm. sharp pointed, with
a few upward curved perichloron edges.
Internodes as long or longer than lvs. Above
internodes very short sometimes 5 mm. Lvs
linear to 45 mm x 2 mm smooth on edges.
Nodes pubescent at base of lvs, enough so to catch
dust & make darkish circle. Infl. axillary
terminal or at branches. Petals 4 or 5! and ac-
cuminate tips inflexed in bud as in
Umbelliferae!! (See 11-6-30)

4-14-30? *Erythraea*

Very early bud Pollenosa-Fermentosa. Almost surely
of Gentianaceae. & sepals 5. Lvs oval 5 nerved so exact.
Er. E. latifolia Sm. Kunt 283, Bar 313. See also. B & H ill
676. Plant glabrous. Lvs rounded or obtuse at apex.

also

[See 4-13-32. This was part of *V. gracilis* (in spite of 1-2 fls) making it 5-seeded and size of fl. Cat. 590 says *V. tetrasperma* has fls 4-5 mm.]

4-14-30 [?] *Vicia tetrasperma* Moench Kunt 119, Bon
87, B & H 127 ill 2 *Ervum tetraspermum* L Bas 141
(*) Pollensa - Formentor. ^{Fl. v. purple fr.} Perhaps near luncheon place
just west of Hotel Formentor. Plant very slender 5-11 in
st. angled, almost glabrous. L fls usually 3 pairs,
(sometimes 4 pr.) some at least acute v more except
those of lowest lvs. definitely obtuse. Tendril seems
always simple, sometimes long v much curled,
sometimes rudimentary. Peduncles very slender
usually (esp in fr) much longer than lvs; 1 or
sometimes 2 fls, very shortly pedicellate or not at all.
Calyx teeth unequal, a rounded deeper sinus bet
the upper (smaller) teeth. Fl 6 mm. or so all
pale lilac not definitely veined. Style compressed
laterally. Pods stipitate obtuse at end, the largest
at this stage 13 mm x 3 mm ^{glabrous!} flat. All seem 5-seeded.
Consider possibility of *V. tetrasperma* Moench var.
gracilis Asche hr. = *V. gracilis* Loisel B & H & Bon =
Ervum gracile DC. Bas. reported as more common
in Majorca. Note calyx, fls v even st. have appressed
short white hairs.

4-14-30 *Cardamine hirsuta* L. (see 3-19-30) Fl & fr.
Formentor R. I.

4-14-30 *Centranthus Calcitrapa* ^{DC} (See 3-26-30) Fl
Formentor Rd. In Bas. 228 diff. between *C. muscivora*
Bois not very clear. But note in this fl. ultimately
2-branched & fls uni-lateral. Bracts thinnish & not
whitish or pinkish bordered are not ciliate.

4-14-30 *Melica minuta* L. Ku 7817, Bas 503 Fl.
Formentor Rd. (Cf. with M. — L. forma vulgaris 4-10-30)
St. 13 in high. Lvs involute setaceous. Effect quite
unlike forma vulgaris but fls quite similar
Spikelets few 3-6 & distant (the space bet. longer
than a spikelet) 5 mm long. Glumes broader than
f. vulgaris at top with short point, not as long as
a spikelet, = *M. ramosa* Vill Bon 864

4-14-30 *Carex*

Fl. In ditch along rd just west of Pollensa Puerto. No lvs
or roots collected. St. slender & but edges not sharp,
ridged. Invol. bract setaceous 1-3 times as long as
head, ^{rough on edges.} head $\frac{1}{2}$ in high of about 8 closely approximate
spikelets. Spikelets most of ♂ fls, a few ♀. Stigmas 2.
Scales brown with broad scarious margins &
narrow lighter colored midrib (greenish sometimes)
which is more or less prolonged at apex. Perigynium
with thin edges & short bidentate beak, culm
rough on edges below infl.

4-14-80 *Lotus creticus* L. (See 3-4-80) Fl. Beach just west of Hotel Formentor (See 4-18-80).

(See 1-1881)
4-14-80??? *Dorycnium hirsutum* See in DC
very early bud. Rd just west of Hotel Formentor opp. luncheon.
Prob belongs to *Lotus-Dorycnium-Tetragonolobus* group.
Cfd with abstr. St. decumbent with numerous side
branches more or less ascending. Side branches
hairy with long, white, soft spreading hairs (older
sts. show remains of these hairs.) Lfts 3 on petiole $1\frac{1}{2}$
mm long with stipules like lfts all with same
hairs as at base, would be rather grayish-
green, ^{even} if no hairs Terminal lft lanceolate 11×4 mm
lateral lfts almost the same, slightly oblique. Stipules
8 mm long, upper side $\frac{1}{2}$ as wide as lower. All entire
v all on very short stalks as in *L. creticus*. Tips of side branches
bear fls in heads sub by lf as in *Lotus*, densely
hairy. Calyx densely hairy with long white hairs,
lobes very narrow, long, acute, anterior lobe longest,
lateral ones shorter & 2 posterior ones still shorter. (Note
this dif from *L. creticus* where lateral lobes are very
short.) Calyx like ill *T. purpureum* Mouch Bon 81

4-14-30 *Quonis reclinata* L. Fl & well advanced
fr. (See 4-3-30) Formentor Rd. Seeds 12, Cordate
at base with one lobe twice as large as other.
Minutely pimply. Calyx lobes acute, not 3-toothed
at apex as 4-3. St. prostrate.

4-14-30 ? *Quonis*

no flor fr. Rd just west of Hotel Formentor opp luncheon.
Herbaceous 6 in, prob. decumbent St pub. with
long white, slightly webby hairs. Hairs of several
cells 20x) Lvs ^{3-foliate} same hairs both sides. Not glaucu-
lar. Stipules oblong 1 cm, attached to petiole more
than $\frac{1}{2}$ their length clasping st. but free in front.
dentate at obtuse tip. Pet. about 1 cm from point
of attachment of stipules to lateral lfts & 6-7 mm
from there to terminal lft. Lfts simply irreg. dentate
all around, veins conspicuous. Terminal lft.
obovate or nearly orbicular 2 cm long, lateral
lfts somewhat smaller, slightly inequilateral.

~~4-14-30~~ 215 RBK

4-14-30 [*Thapsia villosa* L. See 3-15-35]

Lf only. Rd to Formentor east of divide near bottom.
Sheathing base of petiole suggests Umbelliferae.
Lf Δ 6 x 7 in. 3-compound, the ultimate
seg. linear. The rachis winged with decurrent
segments ● (Main ● rachis ● winged

4-14-30

winged only in upper $\frac{2}{3}$ of grayish green, very
apically pubescent above, beneath gray & glabrous
except on veins. Edges revolute.

4-14-30 *Solanum sodomaeum* L (see 2-27-30) Fl &
fr. Pollen ^{east} end of washed away bridge. Calyx
spiny & stellate pubescent. Corolla purple $\frac{7}{8}$ in
wide, stellate pubescent on back. Fl. yellow, glabrous
diam $1\frac{1}{4}$ in diam.

4-14-30? *Ephedra fragilis* Desf. Kn I 376, Bar 431
(see Bar 374) No fl or fr. Fermentor east of divide.
Woody st with branches in whorls of 3. These gray-
green, glabrous, articulated in seg $\frac{3}{4}$ - 2 in long.
suggesting equisetum. Top of each seg with thin,
narrow, brown membrane which extends upward
in 2 low pts on opp sides, prob. sheath of succeeding
seg. Branches seem inclined to bear opp. branch-
lets (or perhaps these buds are for fls)

4-14-30 *Chamaecrops humilis* L. Kn I 351 Bar 445
BM J.C.P. 128 Fl. Fermentor. Fl has disk at its base. Calyx
of 3 very short acuminate seg united at base. Corolla
about 4 x as long also united at base (BM J.C.P. says

"petals free") Stamens 6 anthers united
in tube. Ovaries 3 separate.

4-14-30? *Arum muscivorum* L. f. Kn I 352, Bar
470. Lf only collected Formentor east of divide near
bottom. Middle seg. lanceolate 4 in x 1 in at base
sickle shaped. Lateral seg. (each side) similar
but shorter almost at rt angles to middle seg. This
part looks like a reasonable halberd shaped lf
But in front of above this are 2 more seg on each
side, the edge of the thick basal petiole being
prolonged upward & bearing 2 divergent
lanceolate seg. which are connected with
each other & with lateral segs. This doesn't agree
very well with Bar. but ident. probable.
Lf esp the 3 main seg. vaguely marked
with yellow & with spots of darker green.

~~216 R. R. H.~~ (Sent March 1931)

4-14-30? *Arum pictum* L. Kn I 354, Bar 469. Lf &
unripe fr. In crevice of rock on Formentor Rd
west of divide. Lf light green & yellowish in places
(prob. beginning to wither). Veins all definitely yellowish.
Cordate with basal lobes obtuse, rounded (more than
the other) on inside & divergent but hardly beak-like.
Fruiting head $1\frac{3}{4} \times 1\frac{3}{8}$ in. Fr rounded at top $\frac{1}{16} \times \frac{3}{8}$ in.
Only other possibility is *A. italicum*

4-14-30

italicum Mill which seems unlikely from size of fruit at this time and from position in very dry place (see 11-6-30 Fl col. from what is prob same spot & undoubtedly *C. fruticosum*.)

4-14-30? *Sedum dasyphyllum* L. forma *glanduliferum* Remy (see 3-19-30) No fl or fr. Pollensa west of washed out bridge

4-14-30? *Sedum stellatum* L. (see 3-19-30) No fl or fr. with stors.

4-14-30 *Lettyrus Aphaca* L. (see 4-4-30) No fl or fr. near above

4-14-30 *Hypericum balearicum* L. (see 3-18 & 3-26-30) Fl
Formentor Pl.

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4-14-30 *Cladietia segetum* Ker
Fl Pollensa

4-18-30 *Cheiranthus Cheiri* L. BMJC.P 307 Fl & fr.
Cult. Infanta 8 cfd with following. (A) Single fld with
purplish sepals. (B) Double fld, taller & pointed sepals green.

4-18-30 *Matthiola incana* P & Z. BMJC.P 308 Fl & fr. Cult
Infanta 8.

4-18-30 *Lathyrus odoratus* L. BMJC.P 393. Cult. Rosa's garden
Note pubescent silvery pod.

4-18-30 *Rutia peregrina* L. (See 3-11-19-30) Fl & old fr. partly
small Infanta 8. Corolla 5-parted more often than 4-parted
Lvs in 6's.

4-18-30 *Juganiflorans* L. BMJC.P 650 Bon 256 B & H
374 Fl. Cult. Infanta 8 St very hairy on 2 sides &
almost glabrous on the other 2 (Bon). Calyx lobes ciliate
& the lower ones not fitting snugly around corolla tube.
Calyx & bracts 5-tinged bluish at base.

4-18-30 *Zebrina pendula*, Schumgl. BMJC.P 148 Fl. Cult
Infanta 8. Note broad flat connective, anthers white.

4-18-80. *Glansium flavum* Cr. Kn II 7 B & H 21
8498 P 399
lill₁ = *G. luteum* Scop Bas 21, Bon 13 Fl & young fr.
Porto-Pi (see 3-4-80) Only frs in Bas. & Bon. but note
that tho st. is glabrous the blue gray lvs, sepals
& ovaries are densely covered with thick white hairs
(see B & H) short only on ovaries. Fl. deep yellow 2 in across
very pale ^{inconspicuous} greenish spot at base.

4-18-80 ?? *Centaurea Calcitrapa* L. Kn II 499, Bas 268
Bon 179, B & H 266. Porto-Pi. Very early bud, only the long
(to 1½ in) stiff & very sharp ^{these pointed} spiny invol bracts show-
ing. These bracts greenish-straw color, channeled down
face to the 3/16 in base often with 1 or 2 small setaceous
spinulets at base (Bas. says 4-6). St. about with
long woolly white hairs. Lvs. similarly pub. upper
ones sessile to 9 in long bi-pinnate, lobes linear &
dentate. Mid-rib conspicuously white & margined
into decurrent lobes almost to base & bearing simple
seg. to very base but not decurrent on st. Heads
sem sessile, terminal among lvs.

4-18-80 *Ononis Natrix* L. Kn II 66, Bas 108, Bon 73 & L. 1
v young fr.
Porto Pi. Fl ¾ in overall, standard 5/8 in wide, much
larger than wings & keel, red-veined on back. Keel very
deep toward base the upper edges of texture like wings

leaves pubescent. This is strongly suggestive
of ? *Clusia* 3-26-30 except that lfts are always 3
and stipules not toothed on outer edge near base.
Fr abruptly deflexed at pt. of articulation in peduncle.
Seeds like those of *O. reclinata* L. 7-14-30 in being cordate
at base with one lobe 2x as large as the other. Stamens
monodelphous, filaments flattened at point of joining
anthers. (See 12)

4-18-30 *Convolvulus althaeoides* L. Kunth 396
Bas 317, Bon 317 Fl. Porto Pi,

4-18-30 *Frankenia hirsuta* L. forma *laevis* Kunth
191, = *F. laevis* L Bas 57, Bon 46 ^{60 (A)} B.V.H. Fl. Porto Pi 2002
from train at pto pto. The 5 petals have 2 longitudinal
folds (like scale) on claws & 5 of the 6 stamens
fit into the crease thus formed. Hence 5 stamens of sp
petals (not alt as in B.V.H.) at least so it seems. Lvs 4
at each node 6 mm long, edges revolute but lvs not
as thick as Bon suggests. St. light green. Corolla rose
pink 7 mm across, petals slightly notched & each lobe
denticulate.

(B) Fl. Porto Pi exact place unknown. Ls above but
st. bright red. Lvs darker green than above. Corolla white
3 mm diam.

4-18-30

diam (C) Lilae 4 but st. red.

4-18-30 *Arenaria procumbens* Vahl (see 3-17-30)
Fl. Porto Pi. Seems like 3-17-30 except that st. lvs & calyx
minutely gland-pubescent. No peduncle more than
15 mm. Petals $\frac{1}{3}$ longer than calyx & if opened
wide corolla would be 8-9 mm across. Corolla
kidney shaped & minutely roughened.

4-18-30 *Erythraea pulchella* Fries, Kunt 281, Bas 312
= *E.* — ^{Horn} Bas 313, Bas 213 Fl. Porto Pi.

4-18-30 *Euphorbia* ~~*impurata*~~
(see ?? *E. pityusa* L. 3-30-30) Presb same spec. Fl. very
young fr. Porto Pi. glands a deep yellow sometimes
shallowly notched but often almost rounded.
Seeds at this stage white ^{infinitely} roughened, the small
areole could be called "arriñonada". Capsules
glabrous

4-18-30 *Echium calycinum* Viv. forma *arenarium*
Kunt 311 = ? *E. arenarium* Less Bas 324 withering fl. fr.
Porto Pi. Lvs all withered. Chd with *E. calycinum* Viv

as tentatively identified. Fls perhaps smaller, dark blue; calyxes not enlarging in fr. & more stiffly hairy; floral bracts more definitely obliquely cordate at base; the tubercular base of hairs not purple.

4-18-30? *Bromus sterilis* L. (or one of its forms)
Kun I 323, Bas 508, Bon 368, BVH 551. very like ill Bo
H. Fl. Porto-Ri. 244+. Lfy with overlapping sheaths to
top. Sheaths & blades hairy, hairs longer than ? B hor-
deaceous 4-20 80. Ligule 4 mm like B. h. - but lac-
crates as well as dentate. Sheaths closed part
way or almost to top. Culm at top & all branches
of infl. pubescent. Infl 8 in long inc. awns, nodding
& very loose. Pedicels half-whorled (i.e. whorl goes only
half way around st.) unequal, simple or branched
& bearing 2 florets, the longest 2 in long (not as
long as spikelets with awns if that is what BVH means
551) Base of pedicels (or branches) when joined to
main rachis with enlarged glabrous pad on
inside, more marked than in B. hordeaceous, and
no subtending bract at base of infl. 1st glume
narrowly acuminate, 1-nerved, white margined
15 mm. 2nd glume similar but broader 3-nerved
21 mm. with rough or mid nerve. Lemmas rough
above back $2\frac{1}{2}$ cm long white margined, deeply
& sharply  bidentate, ^{7-nerved} mid-nerve  & lateral 

4-18-30

lateral nerves distinct, intermediate ones less so. Rough area from base of teeth to $4\frac{1}{2}$ cm. Pales much like B. luteaceous.

4-18-30 Compositae

Fl. Porto-R. west end of lower bridge (a causeway)
Exterior fl filiform & interior tubular yellow.
{ Prob. (A) *Coryza ambigua* W. Kunt 448, Bar 238, }
{ See Bon ^{K1} *Frigeron crucifera* Poir. or }

B. *Frigeron canadense* L. Kunt 448, Bar 238, Bon
151, Bon ~~238~~ ²³⁷ (ill). St 15 in high, stout, ridged, branch-
ed from base to top, definitely hairy: some hairs
short & appressed, others longer & spreading
not (horny eye) articulated (Bar 239) Lvs
^{20x} equally hairy both sides, not ciliate. Lower lvs
lanceolate & $\times 1\frac{1}{2}$ in overall. without 3 rather
deeply cut lobes on each side & somewhat toothed
besides, lobes & teeth obtuse mucronate, the
lower $\frac{1}{3}$ of lf narrowing to a broad petiole. Upper
lvs progressively narrower & less toothed, some
having a few long white hairs on edges at base.
All branches terminate in racemes. Pedicels
 $\frac{1}{2}$ in bract (bracts of lower ones lfy & longer than
pedicels. Heads 6 mm high $\times$ 5 mm diam. Invol bracts
linear hairy, purple tipped. Ex & fls dirty white
[or pale yellow] int. fls yellow (in queenish)

[Study] *E. canadensis* 7-10-31 seems to prove
this *Onyza ambigua* DC]

Pappus of few fine hairs as long as involucre,
achenes more pubescent. (See 10-31-30)

4-18-30 *Asteriscus spinosus* L. v. H. (See 3-25-30) Early
fl. Porto-Pi

4-18-30 *Beta vulgaris* L. var. *maritima* Koch. Kn I 437
= *B. maritima* L. Bas 397, Bon 268, BonH 389 Fl. Porto-Pi
St. erect 2 ft. (Consider poss. of *B. vulgaris* L.) but BonH
says "erect or spreading". L. fascic. Bon & pubescent,
not quite entire

4-18-30 *Spargularia rubra* Pers. Kn I 456 (or one of its forms
Kn considers all S. of *Blechna* forms of this) See Bas 71, Bon 53
BonH 78. Fl & fr. Porto-Pi.

4-18-30 *Lotus creticus* L. (See 3-444-14-30) Porto-Pi

4-18-30 *Trifolium scabrum* L. (See 4-10-30) Porto-Pi
Hairs on st. v. lvs appressed v. lft. (at least some) stiff
enough to be called "canaliculatus" & very slightly
"denticulatus"

4-18-30 *Koeleria philloides* Pers. Kn. I 307, Bas 499
Bon 360. Fl. Porto-Ri. Ident. almost sure the
glumes have awns 1 mm inserted between
teeth (Bon p 341 puts *K.* in group with no awns)
and lemma not with "tuberculos y nervios
prominentes" (Bar) in early fl. ~~Spikes~~ Infl $2\frac{1}{2}$
' in or less, Spikelets 3+ mm inc. awns, about
3 fld. Glumes only slightly roughened on back.
Spec. like ill Bon [See 3-30-32. Ident. certain by
note]

4-20-30 *Poterium Sanguisorba* L. var. *muricata*
Auct mult. (See 3-30-30) Early fl. Buñola-Soller Rd
no fl divide.



4-20-30 Bañola to Soler over auto-road.

4-20-30 *Arabis hirsuta* Scop Kn II 33 BvH 31¹¹
A. muralis Bertol Bar 36, Bon 35. Fl. young fr &
remains of last seasons fr. Bañola-Soler Rd no. 7
divide, ^{in wall} Lvs v st. with starchy stellate hairs & epiderm
arsile, not at all clasping & seeds winged caps at
tips (see BvH to contrary) no chance to study position
of radicle but not *A. Theliana* L. (only other form)
because limb of petals not wide (Bar) nor pods spread-
ing. Mature pods to $1\frac{3}{4}$ in. Fls white 7-mm long x 7 mm
wide if petals spread.

4-20-30 *Sibthorpia talarica* Knöch (see 3-26-30) Fl.
No. side divide. Lvs. about 6 mm. Petioles 18 mm or much
less. Corolla with touch of red where stamens attached.

Kn II 124
4-20-30 *Lathyrus angulatus* L var *sphaericus* A
Fl. Field cross cut so. side divide. Tendril very short &
straight in all except ~~2~~ upper lvs where it is imple
but longer & curling. Lft to $2\frac{1}{4}$ in. Stipules about as long
as petiole (more or less) Fl. bright brick red (no trace
of blue purple) lvs not stipitate. Some fls 3 mm
broad, others narrower. = *L. sphaericus* Retz Bar 146
Bon 89

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4-20-30¹⁹ *Vicia lutea* L Kn II 116, Bar 138, Bon 85, BvH 138

Fl & young fr. Dist. so. side of divide. 3-6 in branching from base, erect or spreading. St. delicate angled slightly pubescent. Lfts 2-4 pr, oblong or almost obovate, the largest 8×5 mm, slightly notched at apex with 2 point, smaller ones 5×3 mm & some of upper ones bending more towards linear, slightly pubescent esp on back. Stipules half-sagittate, sharp pointed, sometimes dentate toward base & pubescent enough to look ciliate, some at least of upper ones with dark spot. Tendril very short in most lvs but in some of upper ones longer & curled, simple or (in 2 cases) with 2 short branches. Fls. solitary ^{almost} sessile, 12-14 mm long. Calyx seems regular ^{like} more or less reddish with sharp points green, ^{almost} pubescent & looks ciliate. Standard a very pale yellow no colored veins but tinged purplish in claw. Wings & keel still pale (almost white) Very young fr. seems pubescent on edges only, at base, if any, very short & thick. Standard glabrous. Not like ill of *V. lutea* B & H.

4-20-30! *Altis australis* L. Bar 422. Box 283
Fl. Cult at what S. K. calls "mule deer's house" north side of divide near top. Lvs just coming out & fls fading. Stamens 5 sp. per. ~~pubes.~~ At base of filament a hairy ring (disk?) encircling ovary.

4-20-30 *Juglans regia* L. Bar 426 ~~3284~~ 3 MJC.P.
237 Lf & fl only col. Cult house near top of divide no.
side. Lvs with strong but pleasant odor when crushed.

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4-20-30 *Lathyrus Ochrus* DC. Kn II 123, Bar 144 Bon
88 Fl & well developed fr. So. side of divide practically
at top. (S. clinto wall to get it) Exactly as desc Bar. But
note as to stipules: the broad lvs petioles are
decurrent on st. & have no stipules or only a
short tooth to represent a stipule on each side;
the uppermost petioles which bear lfts have
these teeth developed to look more like stipules.
Corolla pale yellow, standard delicately veined
darker.

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4-20-30 *Allium subhirsutum* L. var. *subullosum*
Bat. & Trab. Kn I 370 = *A. subullosum* Salzm Bar 438.
Fl. Plentiful in one spot west side of rd, no. side
of divide near base. As desc. Bar except "bulbillos"
not evident. Scape (to $10\frac{1}{2}$ in.) sometimes shorter
but mostly 1 in or more longer than lvs. Fls
8-18 (usually about 12). Note: filaments longer than
perianth parts. Kn thinks this may not grow
in Mayra & plants mistaken for it were a form
of *A. subhirsutum* L. (see 4-4-30) with which

this was compared. 4-20-30 has st. round but more slender. Lvs 3-5 mm wide, anthers yellow. Lf tapering to much finer point & ~~not~~ ciliate only below middle, peduncle & back of lf not shiny. (See 4-10-30)

4-20-30 *Aceras anthropophora* P. B. & Kn I 411, Bas 455 Bon 810, B. & H. 463 Fl. On ledge in wall above rd just below house no. side of divide where there is fountain. Sepals green with red line on edges, petals green, lip green more or less ruddy or yellowish.

4-20-30 *Orchis intacta* Link = *Aceras densiflora* Boiss (See 4-4 & 4-10-30) Fl. No side divide. Fl with enough purple spots & stripes to look pink (as in 4-10-30 but middle lobe of lip at least sometimes toothed as in 4-4-30).

4-20-30 *Potentilla reptans* L. (See 3-19-30) Fl. No side of divide.

→ *Scorpiurus antivillosa* L. Kn 109, Bar 147 Bon
70. ~~*Scorpiurus sulcata* S. *sulcata* L.~~

4-20-30 *Hymenocarpus circinata* San Kn
78, Bar 113, Bon 78. Fl & well advanced fr. Short
cut thru field just above Alfabia (and prob. further
up on so side of divide). Low almost prostrate. All lvs
simple, oblanceolate, entire, acute, tapering to
slender petiole to $1 \times \frac{1}{4}$ in. overall. Lvs with definite
lanceolate, acute, stipules (~~*Bassia*~~) attached
to petiole to above middle, white edged on outside, the
rest often red. The stipules of successive lvs. closely
overlapping (giving broad, flat shingled look to stem).
Lvs rather thickish, dull green, only the mid nerve
evident, more or less white pubescent (silky) esp.
on edges. Peduncles longer than lvs to $1 \frac{1}{2}$ in.
(Every so they lengthen in fr.? spec. fr only collected
with peduncle 5 in.) Peduncle bears 1-5 fls. (usually
1) with very small (short & broad?) slightly toothed
whitish bract below fl. really at base of each ped-
icel) on inside. ~~*Bassia*~~ "baccata lanceolata"
~~"hipphata"~~ Calyx tubular, 6 mm long cut about
half way to base in 5 sharp teeth. Lower 3 teeth
separated by wide but pointed sinuses. The
2 upper teeth narrower & less deeply divided;
2 lateral sinuses rounded & deeper than any of
others. Fl about 9 mm overall. Corolla deep yellow,
standard delicately veined red. Keel turned
upward & narrowed at tip. Stamens clearly *dis-*
sepiments (~~*Bassia*~~ *modelflorae*). Filaments

slender, the longer ones with inflated whitish tips, anthers very small. Style slender, longer than filaments with very small terminal stigma. Fr. linear, the upper half (at least) curved in spiral, ridged & rough & spiny on back. Unles 5 - in only one studied, oblong. Most advanced fr. very like ill Bon.

4-20-30 *Veronica arvensis* L. Kn II 386, Bar 344, Bon 236, B & H. 349. Fl & Fr. Buñola - Soler. Lvs 5-nerved.

4-20-30 *Rutia peregrina* L. (See 3-11-19; 4-18-30 Fl. Buñola - Soler. prob. var. *balearica* with Bar 219. From stout perennial root a thicket of branches 8 in high. Internodes & lvs about 15 mm., lvs less than 2 mm wide & as dense in Bar except whorled in 4's. Corolla often 6-parted.

4-20-30 *Anthemis arvensis* L. (See 3-10-30) Fl. Buñola - Soler. Scales of invol. white & transparent with brown edges & green midrib, pubescent. Ray fls. with stigma (See B & H.)

4-20-30 *Geranium dissectum* L. (See 4-~~16~~⁴-30, Pl from Buñola station to Palma - Soler Pl.

4-20-30 *Allium*

Remains of fl. last season & very young buds, too young to show clear of filaments. No. side of divide (in sight of T.R. tunnel) St. poss lfy. Lvs flat, slightly beaked, the widest 7 mm, glabrous except for few distant short hairs on edge towards base, mostly pointing downward. This diff from *A. evanum* L. of 4-10-30 whose roughness is almost tuberculate (papillate) & from *Allium* ——— 4-10-30 which is entirely glabrous. Diff from this last also in having no ligule, & bulbs small 5 mm with several layers of brownish tunica but no bulbils. Scapes & pedicels (last seasons) more slender than in other spp. studied. Capsules not more than 4 mm high & 5-6 mm across when open & empty.

4-20-30 *Reseda luteola* L. Kn II 38 Bar 55; Bar 38 B & H 53 ill. So of divide very near top. (A) Fl. Lvs hardly waved on edges. Upper petal about 5-divided, lateral petals about 3-divided, lower petal undivided (B) In early bud lvs strongly waved on edges.

4-20-30 *Anclusa italica* Retz (See 4-4-30) Fl. So. of divide near top. St & infl. calyx & bracts all purplish. Root black.

4-20-30 ? *Lythrum*

No fl or fr. Prob from ditch with water So of divide.

St strongly angled, purplish on one side. Lvs all
alt with buds & small branches in ^{axils} ~~axils~~ glabrous,
entire, sessile, obtuse, St. upright, lvs not narrow
at base. This guess made on memory of look of
Lythrum at home [7-4-32 From car saw *Lythrum*
in flat this place, seemed to be *L. hesseferi*. Tom which
was collect on north side of coll later in the day]

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4-20-30 *Ornithogalum umbellatum* L. Fl (See 3-29-30)
Fl. So side divide more than half way up. Only
1 spec seen. Lf long (11 in) mesoa, 1/2 in wide with
wide stripe in center. Scape 9 in. Lower pedicels
at rt. Ls to scape.

4-20-30 *Galium Mullugo* L. var. *cineereum* Biebr(?)
perhaps = *G. erectum* Huds Bae 220. See also Bon.
141 & BTH. 281. Fl. No of divide (in sight of P.R. tunnel
end). Prob the same as 4-14-30 having petals with
sharp inflexed tips even in anthesis. Lvs in
6's rather stiff linear 6 mm x 1 mm, sharp pointed,
edges somewhat reflexed & with a few upward
pointing bristles. Mid nerve below broad & rounded
(suggests *G. cornudaeifolium* Vil. Bae 221) St. smooth,
4 led, swollen above nodes. Infl a long narrow
panicle. Corolla 3+ mm diam. not counting the

inflexed tips Anthers yellow at anthesis
soon turn dark brown. Fr (at this stage smooth)
Internodes in infl 1-2 in.

4-20-30 *Dryocnium pentaphyllum* Scop. (see
3-26-30) Fl. So. side of divide. Calyx tubular with
5 almost equal teeth ("casi bilabiato" Bas). Corolla
tubes with conspicuous upward protruding
pouch. Lf. just below fl head 3-foliate. Note
that sessile lf seems really 5-foliate with 2
long free stipules.

4-20-30 *Argyrolobium argenteum* Willd. v. L. Kunt
57 = *A. linnoeanum* Walp Bas 107, Bon 71. Fls well
advanced fr. Binola - Teller Pl locus unknown.
Thick woody tap root with very short branches at
top $\frac{1}{2}$ in - which bear a thick set of slender upright
densely white silky branches 6 in high. Lvs 3-foliate,
lfts at top of petiole 1- $\frac{1}{2}$ cm. Lfts 1 cm x 3-5 mm. Stipules
to 5 mm.
linear-lanceolate, free from petiole and joined
at base on side opp. petiole. Calyx 3 lipped, the
upper lip of 2 long sharp teeth divided practically to
base, lower lip of 3 teeth less deeply divided. Standard
very silky pubescent on back, marked with
delicate, broken, dark lines inside toward
base. Stamens monodelph- ma. Style

4-20-30

Style curved with stigma set obliquely. Fls. terminal usually in threes the very short pedicels with bract at top & 2 lateral bracts very slightly ^{longer?} inflex. Fr. compressed the largest (at this stage) about 1 in. long. Fr bears the somewhat upward curving style but this is not (see Box) as long as fr is broad. All green parts incl. fr. silky pub. like at, less so on upper side.

4-20-30 *Rhamnus* ^{*alaternus*} ~~*alternans*~~ L. (see 2-27-30) Fr. near top of divide. Short axillary racemes with 1-3 ripening frs. Bracts from which pedicels have fallen cup like as desc 2-27-30. Calyx persistent & entire at top as though lobes had broken off as fr. expanded. Fr dark red, slightly obovate $\frac{6}{8} \times 5$ mm. Nuts 3.

4-20-30 *Crataegus* *Azardus* L. Ber 167, Box 102 B M G. P 367. Fl. 1st house no. of divide & again lower down. Lvs & petals stiff & firm. Pubescence of lvs & ped. B M G. P not as much as Ber & Box suggest. Fl $\frac{5}{8}$ in diam. S. bought one of these frs. carried in Palma.

4-20-30 *Lepidium* *Draba* L. Ku II 13, Bar 42, Box 93. Box 48. Fl & very young fr. Buñola rd from station near its junction with Palma-Soller Rl. St led. hairs

point downward. All lvs. toothed, auricles pointed.
Too young to study cotyledons.

222

4-20-30 *Vicia benghalensis* L. Kn II 117, = *Cracca*
atropurpurea Rod. & Sch. ^{Bar} 140 = *V. atropurpurea*
Desf. Bon 87. Fl. Buñola-Soller. perhaps in
field just above Alfatia. St & lvs. obviously pubescent.
Lfts about 9 pairs, long ~~12~~ 13 cm. Stipules
semi-ovate, deeply toothed. Infl. a raceme
shorter than lft. peduncle 1-2 x as long as fl.
Fl 12 or less. 16 mm long, purple, the tips of
standard, wings & keel very dark. Calyx
purplish, hairy, the 2 upper teeth very short,
the 3 lower long & narrow. Style compressed
laterally. Ovary stipitate pubescent, beak 4.
Fls at first at tip of peduncle, then deflexed
Tendrils branched. Narrowed place in standard
was not below middle & perhaps was above.

4-20-30? *Ononis antiquorum* L. Kn II 67, Bon
72 (proline O. — L Bar 571; O. repens L. Bar 110;
O. procurrens Wall's Bar 110. See also O. asvensis L
B & H 109) No fl or fr. So side of divide. St woody, red-
dish, pubescent below, gland-pust above as
are lvs. Each short lf. bearing branch ending in
a spine. ● which ● permits ● after lvs.

4-20-30

lv. fall. Acc to Bar, *O. procurrens* Wall is the most common of this group in Najasa.

4-20-30 ³³ *Bromus hordeaceus* L. Kunt 335 = *Sesuvium*
falcus mollis Parl Bar 510 = *B. mollis* L. Bar 368, BTH
552. Early fl. Prod mid from Buñola Stat. to the Palma-
Soller Rd. ~~Culm~~ 18 in high, decumbent at base then
strictly upright. Up to top, the upper lf blade 4 in
reaching to above middle of panicle. Part of culm
showing below panicle $1\frac{3}{8}$ in ridged but not pubes-
cent ("pubescentes in extremis" Bar). Sheaths
& blades softly & noticeably pubescent. Sheaths
overlapping & closed almost to top. Ligule white,
rather tougher than the papery ligules of some
grasses. 2-3 mm, sharply dentate (this is not
the irreg. laceration often found) & woolly on back.
Lvs. 7 mm wide. Infl subtended by glabrous lance-
olate bract 3 mm long which has no sheath but
clasps culm with an abruptly extended base.
Stg infl (on both spec. colls) has not very def
ridge prolonged downward from 2nd verticil
& ending in a knob-like protuberance somewhere
along the internode. Panicle $3\frac{1}{2}$ in $\times$ $3\frac{1}{4}$ in, branches
pubescent, ^{very} unequal verticillate, making com-
pact narrowly oval head at this stage. Spikelet
18 mm inc awns 6-10 fld, pubescent. Glumes
tipped with blunt projecting point, the lower

5-nerved, upper 7-nerved. ^{7-8mm} ~~But~~ Lemma 7-nerved
(or more lemmas & glumes sometimes having an
extra nerve on one side) white edged, bi-dentate
at top with rough ^{6 mm.} awns from bet. teeth. Palea very
thin & transparent, green nerved & distantly ciliate
on the 2 widely separated beaks. Feathers & white
stigmata below top of awns (in fact below middle
at this stage at base of what seems will be
terminal appendage to grain) Stamens 3, no
sign of them being adnate to palea (B.M. J.C.P. 11?)
Neither glumes nor lemmas beaked. Awns at this stage
erect. Cf. *B. sterilis* L. 4-18-30. (See 10-28-30

4-20-30 *Dactylis glomerata* var. *hispanica* Koch
Kunt 318 = *D. hispanica* Roth. Reht. Bas 504, Bon
564. (See B & N 554) Fl. Lathouse "multiceps" 20
side of divide. Epilachne practically sessile
(See 10-18-30)

4-20-30 *Lolium perenne* L (in one of its forms)
Kunt 331, Bez 516, Bon 371, B & N 548. Fl Rd from Bunda
Station to Palma-Soller R.R. Glume slightly longer
than lemmas (perhaps because fl. young) ~~but~~ no
awns. Lemmas almost blunt at apex. Note the
2 lateral nerves distinct, the 3 inner ones less
so.

4-20-30 *Ranunculus parviflorus* L. (See 3-30-30) Fl. V
fr. Bañola-Solles. Cfd with *R. muricatus* L. 4-14-30.

4-20-30 *Ruscus aculeatus* L. Kunt 382, Bas 443, Bon
302, BVH. 467, BM. G. C. P. 167 20 young fr. No divide.

Cfd with *R. hypoglossum* L. cult Infanta 8 (See 3-10-30)
~~Cladodes~~ ^{Cladode} stiff, not drooping, pedicels mostly terminated
as that of *R. hypoglossum* with bracts 1/2 x 3/4
in, tip a sharp spine, Bracts which subtend fls
not as def as in *R. H* —. x Cladode with 2 ridges from
base to infl.

var. *obtusiflora* Rehb.
4-20-30 *Orelio mascula* L. Kunt I 401, Bas 458, Bon
311, BVH. 460. Ill Bon like spec but ill BVH not very
helpful. Fl. No So, side divide near top. 7 in high
lvs with mid-rib almost beaked or beak. Broadest
fl. 15 mm. Purple spots, if any, are very obscure.
lvs 3 v above them bracts sheathing at to 1 in
of infl. Fls. purple, the lip lighter with purple
dots. Lateral sepals obtuse & wide & spreading or
turned back. Posterior sepal erect or more or less arched
over the 2 petals which are almost as wide as sepals
& which form hood over column. Spur enlarged
at tip, horizontal or pointing upward.

4-20-30 *Scirpus Holoschoenus* L. Kn I 341
Bar 476, Bon 325; BVH 501. Fl. in ditch with water
so divide with plant thought poor & y. th. m.
July top of culms collected. This is only sp in
Kn & Bar with infl in compact balls see ill BVH.
Peduncles 5-8, thick but flattened & inclined to twist
heads to 10 mundiam. Inf. compound by 2 heads at
same point & by 1 or more peduncles seeming to
issue from the heads. St round or oval. Floral br
a stiff continuation of st. St was not lfy. & any
sheath at base under water & not seen.
stigmata 3 (BVH says usually 2) Scales reddish
brown not fringed, slightly denticulate with
mid rib very slightly projecting.

4-22-30 *Convolvulus arvensis* L. Kn II 296,
Bar 316, Bon 217, BVH 317. Fl. On "Sheep Road"

223

4-25-30 *Orobancha speciosa* DC. Ku II 400 Bor 343
 Fl. numerous in field where *Vicia Fata* had just been
 cut. in middle of henora east of ravine. Spikes 5 in with
 unopened buds at top. (Others in field taller.) St thick
 $\frac{1}{2} \times \frac{3}{8}$ in purplish with short, woolly pubescence. Bracts
 broad, color & pubescence of st. almost as long as corolla
 (1 subtending each fl.) Calyx (?) 2 narrow lanceolate-
 linear lobes, 15 mm long, purplish, gland-pub. at top,
completely cut to base so that they look like lateral
 bracts but are inside the broad bract at its edges.
~~Collo~~ Corolla 1 in long & about as wide (if fully opened)
 the 5 almost equal lobes rounded, crenate & toothed
 white with purple veins, tube gland-pub. out-
 side. Filaments affixed near base of corolla, have
 enlarged yellow base, ^{all} mostly glabrous, but with
 pubescence near base on back & ^{front?} more or less gland.
 pub. near top. Anthers purple with sharp points
 below. Style somewhat gland-pub, stigma with
 2 horizontal lobes is reddish brown (not "violet
 claret" Bor. Spikes compact fragrant. Gd with
 below.

4-25-30 *Orobancha ramosa* L. forme *caesia* ^{see} (3-26-30)
 Fl. henora circumscribed.

4-25-30 *Lens esculenta* Muench Bar 142, B.M. JCP.

391 = *Vicia Lens* Cass & Heron Bon 87 Fl. evidently cult in field with *Leobanche speciosa*. St very sharply led. Raceme usually 5 fld. Tendril so short as to pass unnoticed. Calyx deeply cut but tube almost $\frac{1}{3}$ of whole length (perhaps $\frac{1}{4}$). Corolla white very delicately veined blue. Lower lvs with lflets about twice as large as upper lvs. have. Many glabrous except on edges, shows beginning of "escotata" (Bar). Stipules entire standing forward like little ears.

4-25-30. *Cicer arietinum* L. Bar 143. Bon 87, B.M. JCP 394. Fl. v. unripe fr. Cult. Kenia. Calyx gibbous on upper side of base. Fls. white turning cream, not at all purplish on very short peduncles which ^{in fr.} lengthen & become sharply deflexed at a point about mid-way where several small bracts (5) subtend its articulation. Pod velvety.

4-25-30 *Micromeria nervosa* Benth Kn II-351, Bar 360. Fl. Rd from Kenia to Marivent train stop. Judged to be this instead of *M. biflora* Benth var. *Rodriguezii* Knoch because fl. is whole of more than 6, to 20 or more and lvs not revolute, ~~acute~~ (not sharp at tip)
Bracts ● 2mm ● or less ● long.

[In the light of 4-25-32 #6594 this was almost
4-25-30 surely *M. nervosa* Benth
long, ciliate.

224 (see at end)

4-25-30 ?? *Centaurea salmantica* L. Kn II 499

= *Microlophus salmanticus* Bae 269, Bon 181

Fl. ^{advanced for} on upper part of circular rd. known soon
after leaving village. In waste field near house
so consider poss. of an escape not in manuals.
Cfd with *C. aspera* L. If in Bar this is only pos
see p 261 as filaments are free, anthers without
appendix, hilum lateral pappus of free scales.

To 3 ft. & slender, ridged, more or less woolly
below, branched above with long naked branches
that bear terminal V (near the end a few lateral
fl. heads. Lvs. mostly at base with smaller ones on
st. to below middle. Lvs all pinnate with narrow
linear widely separated seg. toothed & rough
on edges with short prickles (not spiny), mid
rib above densely woolly. Invol. narrowly ovate
3/4 in high. Bracts purplish or green with purple
tip sharp but not spiny faintest, the shorter
outer ones whitish or edged. Corollas bright purple
the outer radiant sterile, inner ones perfect.
Receptacle with long white scales. Achenes, ^{long} _{5 mm}
smooth (at well developed stage) minutely
downy with ring of short hair at top, just be-
low entire edge. Pappus of scales, short

[*Trid. Crapina vulgaris* Cass. Kunt 565; Bar 181
inc *C. crispinastrius* Vir Bar 271 = *C. Moirii* Bar
note # 349 See also ill Thompson F. P. of the P. Plate XIX
very white outside graduating to 1 cm.
with golden-brown tips. The undermost row
consisting of 5 flat, short scales.

4-25-30 *Trisetum ovatum* Gr & Sode Kunt 334 =
Aegilops ovata L Bar 572, Bar 370 and inc *A. rei-*
aristata Willd Bar 542 Bar 370. Fl. Kinora, rid of sp.
Leobanche speciosa. Glumes with 3-5 awns
which are white on edges & mid rib, rough on edges
Glumes softly pubescent rather than "luzado-"
saperas" & very convex. - awns 2 awned.
Each spikelet with 1-2 sterile fls at top but terminal
spikelet fertile ^{anther} hairy pubescent at top. Awns so
spreading as to be almost horizontal.

4-25-30 *Hordeum vulgare* L. Bar 510, Bar 369. BM CP 117
Kinora, Cult

4-25-30 *Brachypodium pinnatum* P. Beauv.
var *ramosum* Kunt 337 inc. [?] *B. pinnatum* P. B.
var *anapale* Kunt Bar 575 v ~~for~~ *B. ramosum*
RV SA ^{Bar 515} Bar 370. Early fl. hill west of Kinora on
circular rid. St to 157 in high, very slender,
branched & lfy at base. Lvs $1\frac{1}{2}$ -3 in setaceous
from base.    
ing in- volute edges

4-25-30 ^{edges at 1st & 2nd}

^{edges at 1st & 2nd} Ligules truncate, ciliate on top & downy on back. Base of sheath downy at node. Infl of 4 almost sessile spikelets often with signs of 1 or 2 abortive ones below. Spikelets (at this stage) $\frac{3}{4}$ -1 in long, ^{mostly} curving outward with tips of fls conspicuous on upper side. Florets about 8-12. 1st glume 3-nerved, 2nd glume 5-nerved. Lemma 7-nerved shorter than palea & with short awn (less than $\frac{1}{2}$ its length) from obtuse apex. Paleas ciliate on beels & top rounded. If in Bar "patulas" means extended desc of Brachyotum is perhaps best except as to spikelets curved & lemma shorter than palea.

4-25-30 *Trigella damascena* L. Kn I 4%, Bar 16, Bon 10, BM & C.P. 279. Fl. herosa with *Trisetum ovatum*. Fl & unripe fr. Note claw of petal abruptly bent upwards & enlarged at this point into nectar pit which is covered by a scale as large as petal blade. Each seg. of blade of petal has dark green glandular protuberance at base. As pod matures its inner lining is freed from wall making cross sections look like one capsule inside the other. Basal lvs. less finely cut than upper ones.

4-25-30 *Linaria triphylla* Mill (See 3-17-30) Fl v
advanced fr. Field at train stop near Marinette
on path to Kenosha. Fl pale yellow, palate deep yellow,
spur purplish Lvs sometimes scattered. Seeds
triangular v very rough, pods show markings
of what prob. will be seed. Bract subtending fl.
reflexed.

? *E. serrata* L See 11-14-30.

4-25-30 *Euphorbia*

(See ?? *E. platyphylla* 3-14-30) Fl v well advanced
fr. Seneca. Glands yellow more or less truncate
v toothed sometimes with 2 more marked teeth
at corners. This is prob. not *E. platyphylla* but
should be sought among *E.* with crescent shaped
glands. Seeds (not yet ripe) smooth v white.

4-25-30 *Bromus sterilis* L. var *rubens* Kn I 335
= *B. rubens* L. Bas 509 In desc Bas. but lemma (infl)
not as angular on back as ang. Box. Infl not old
enough to see if "combes en dehors" Bon. Note lem-
ma bidentate only 1 mm v awn placed 4 mm
from extreme tip. Awn $\pm 1\frac{1}{2}$ x as long as lemma,
reddish. Glumes are unequal, very sharp v
widely scarious on margins

4-25-30 *Stipa capillata* L. var. *pinnata* (See 3-17 & 4-10-30)
Near Kenosha. Awns somewhat twisted not
yet geniculate at the tip, detach readily
from lemma.

4-25-30 *Papaver somniferum* L. Bar 20, Bor
BMJCA BUN. Fl. Roadside Kenosha.

4-25-30 *Elyzopsis miliacea* Asch & Schuy. Kunt
298 = *Piptatherum multiflorum* P.B. Bar 495,
Bor. 357. Near Kenosha. Spikelet 5-6 mm small,
awn longer than lemma. Lemma blunt at apex
shorthy bidentate with sinus rounded. Palea
not beaked. St. 30 in high, stout, glabrous dark green
lvs thickish.

4-25-30 *Linum strictum* L. Kn II 135, Bar 74 Fl
Near Kenosha. Ident. by lvs almost appressed & pedicels
very short & thick. P.B. *Linum* of 4-10-30 was this.

~~224~~ 225

4-25-30 *Gladiolus illyricus* Koch
Kenosha



5-3-30 *Ophrys apifera* Huds. Bon 312, B & H 464.

No root col. by fellow passengers on boat Palma - Barcelona probably in Bellver perhaps elsewhere. No root. Called by her "*O. scolopax*" but this not reported from Majorca & acc to Bon has "voire prolonge en bec court." Mrs. Fletcher called it "bee orchis". St. (as col.) 16 in. Lvs 2, lanceolate, on lower part of st., prob. not at very base. Fls 6. Bracts green longer than ovary. Sepals spreading, ovate to 15 mm long, pinkish with green veins. Petals green, hairy above, very short ($3\frac{1}{2}$ mm), Dular, broad at base & obtuse at apex with edges rolled back. Lip shorter than sepals, cut near base into 3 lobes: the lateral lobes brown, velvety with long hairs, Dular, with one corner projecting upward (like lance of bee). Middle lobe sac-like, greenish brown & long velvety toward tip (i.e. where tip curves downward) otherwise glabrous, dark brown marked with green & with 2 small upward projecting teeth at very base (eyes of bee?). The middle lobe of lip has itself 3 shallow lobes at tip (not visible from above) of these: the 2 lateral are rounded, the middle one narrow & more or less curved outward & upward, all are green & glabrous. Column stands high above stigma, with long beak above anthers. J. All th 1013 B & H. suggestive but not exact. Ill Bon. better.



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